

THE
WHOLE WORKS
Of that Excellent
PRACTICAL
Physician,

Dr. Thomas Sydenham.

WHEREIN

Not only the History and Cures
of Acute Diseases are treated of, after a
New and Accurate Method ; But also the
Shortest and Safest Way of Curing most
Chronical Diseases.

The Fourth Edition, Corrected from the
Original *Latin*, by *John Pecbey*, M. D.
of the College of Physicians in London.

L O N D O N,

Printed for R. Wellington, at the *Dolphin*
and *Crown*, at the West-End of *St. Paul's*
Church-Yard, 1705.

WHOLE

PRACTICE



Dr. Thomas

Not only the history of the
of the University of London
New University of London
School of Medicine
Chronic Diseases

The first edition of the
Original text by the
of the University of London

LONDON
Printed for H. Kew
and sold by the
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THE
TRANSLATOR'S
PREFACE

HE that designs to attain to the right understanding of any Art or Profession, usually chooseth some Eminent Man of the Art to be his Guide and Pattern, by whose Directions and Example, joyned with a tolerable Capacity, and sufficient Diligence, he is, and is deemed, at a stated Period, legally qualified for the Exercise of the Art he professes. And this I take to be the best and readiest way of attaining to the knowledge of any Art.

But seeing by the Custom of our Country, Physicians are educated another way; and chiefly improve themselves by Study and Books, it behoves them to make choice of such Authors as have been much conversant in Practice, and are generally accounted Candid and Sincere. In the first Rank of these I place this Author, who was peculiarly disposed for Practice, and a Vein of Sincerity runs through his whole Works; a thing very rare in Physical Authors, especially in the Modern; and for this reason it was he was so much calumniated by ill Men.

This worthy Man was always busied in improving the Practice of Physick, even then when he was Stepping on the Threshold of the other World;

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and, like the Great *Archimedes*, would not suffer himself to be interrupted by any thing but resistless Fate.

He died in the Sixty eighth Year of his Age : A great Age it was for one that had been closely besieged near half the time, with the *Opprobrium Medicorum*, the Gout ; which finding its frequent Efforts repelled by his great Skill, called in its Auxiliary the Stone, and together, with much ado, they stormed the tottering Tenement of Clay, when by reason of Age it was scarce Tenible any longer.

He was born in *Dorsetshire* : His Father was a Gentleman of good Reputation, and a plentiful Estate. He was educated in *All-Souls College* in *Oxford*, and was Fellow of the same, and afterwards a Member and Ornament of the *College of Physicians*, in *London*.

He was Religious, Loyal, Learned, of a Solid Judgment, and Sterling Honesty : But I shall say no more of him, his Book will be the best and most lasting Monument of his Fame.

From the *Angel and Crown*
in *Basing-lane London*, Octob:
12. 1695.

The AUTHOR'S
P R E F A C E.

AS the Human Body is so fram'd by Nature, that by reason of a continual flux of Particles, and the force of external Things, it cannot always continue the same; upon which account there have been great numbers of Diseases in all Ages; so without doubt, the necessity of finding out the Art of healing has exercised the Wits of Men for many Ages, not only before the Grecian Esculapius, but the Egyptian too, who was a thousand Years his Senior. And indeed, as there is no Man can tell who first contriv'd the use of Houses and Cloaths to defend us from the Injuries of the Weather, so the beginning of the Art of Physick can be no more discovered than the Fountain of the River Nile; for this, as well as other Arts, has been always in use, though it has been more or less cultivated, according to the various dispositions of Times and Countries. How much the Ancients, and amongst the chief, Hippocrates, have performed, is well known from whom, and whose Writings we have received the best part of the Therapeuticks: And in the succeeding Ages the Industry of some has appeared, who have enlarg'd the Province of Physick, by applying themselves either to Anatomy, Pharmacy, or the Art of Healing, to say nothing of Britain, and of this Age, wherein there has not been wanting some who have labour'd in every kind of Science, whereby they might increase the Medical Art: But I am unable to speak their Praise. But how great soever others Endeavours have been, I always thought I lived in vain, unless I, being of the same Employment, contributed something, how small soever, to the Treasury of Physick: Wherefore, after long Meditation, and a diligent and faithful Observation of many Years, at length I resolv'd to propose my Opinion, by what means the Art of Healing may be further promoted, and then to publish a Specimen of my Endeavours in this business.

I think our Art may be best improved, first by a History, or Description of all Diseases, as Graphically and Naturally as possibly

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ably may be; and, secondly, by a perfect and stable Practice of Method respecting them. It is, indeed, very easy to describe Diseases grossly; but so to write the History of them, that the Censure of my Lord Bacon may be avoided, whereby he chastises some such Promisers, is more difficult. We know, says the Noble Author, we may have a natural History large of Bulk, and pleasant for Variety, and neatly contrived: But if any one should weed out the Fables, Quotations, needless Controversies, and Flourishes, which are more proper for Table-Talk, and Stories in a Chimney-corner, than for an Institution in Philosophy, the Matter would fall to nothing, This is far from the History we propose. In like manner the History of Diseases, according to Custom, are easily proposed. But to do this so, as that words may pass into Actions, and that the Event may be agreeable to the Promises, they will judge is a Task more difficult, who see there are many Diseases in practical Writers, which neither they, nor no body else are able to cure.

But as to the History of Diseases, if any one weighs the Matter carefully, he will soon perceive, that the Writer ought to apply his Mind to many more things than is commonly thought. It will be sufficient to touch upon a few of them at present.

First, It is necessary that all Diseases should be reduced to certain and definite Species, with the same diligence we see it is done by Botanick Writers in their Herballs. For there are found Diseases that are reduced under the same Genius and Name, and as to some Symptoms, are like one another; yet they are different in their Natures, and require a different way of Cure. Every one knows that the Word Carduus is extended to a great many Species of Herbs; but he would be thought a very ignorant Herbalist, that should content himself to propose only the general Description of the Plant, whereby it differs from the rest, and in the mean while should neglect the proper and peculiar Signs of every Species, whereby they are distinguish'd one from another; so it is not sufficient for a Writer to mark only the common Appearances of any Disease: For though the same variety does not happen to all Diseases, yet very many that are treated of by Authors under the same Title without any distinction of Species, are very unlike, as I hope to make appear plainly in the following Pages: when they are distinguished into Species, it is most commonly done to serve an Hypothesis built upon the true Phenomena, and so such a Discrimination is useful much

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much accommodated to the Nature of the Disease, as to the humour of the Author, and his Theory of Philosophizing. How much Physick has been obstructed for want of such an exactness in this Matter, many Diseases shew, the Cures whereof had not been now to seek, if Writers in communicating their Experiments and Observations had not took one Disease for another: And this, I suppose, is the reason why the *Materia Medica* is so wonderfully encreased, and to so little purpose.

Moreover, in writing a History of Diseases, every Philosophical Hypothesis that has enveigled the Writer's Mind, ought to be set aside, and then the clear and natural Phenomena of Diseases, how small soever they are, should be exactly marked, as Painters express the smallest Spots or Moles in the Face: For it can scarce be imagined how many Errors have been occasioned by Hypotheses, when Writers, deceived by false Colours, have assigned such Phenomena for Diseases, as are no where to be found but in their own Brains; but they ought to appear, if the Truth of the Hypothesis, which they count certain, were manifest. Moreover, if any Symptom, which exactly suits with the said Hypothesis, really belongs to the Disease they are about to delineate, that they magnifie above measure, as if that were all; but if it do not well agree with their Hypothesis, they either pass it by in silence, or touch it by the bye, unless they can by some Philosophical Subtlety make it serve a turn.

But Thirdly, It is necessary in describing any Disease, to mention the peculiar and perpetual Phenomena apart from those which are accidental and adventitious; such are those which come from the Temper and Age of the Patient, and from the different methods of Cure; for it often happens, that the Face of the Disease varies according to the various Processes of Healing, and some Symptoms, rather proceed from the Physician than from the Disease; and those that labour of the same Disease, add are treated with different Methods; have various Symptoms; therefore, unless Caution be used, the Judgment about the Symptoms of Diseases will be very uncertain; to say nothing of rare Cases, which do no more properly belong to the History of Diseases, than in the Description of Sage, the biting if the Palmer is to be accounted among the discriminating Signs of that Plant.

Lastly, The seasons of the year, which chiefly favour any kind of Diseases, are carefully to be observed. I confess some come at any time; yet others, and not a few, by a certain occult influence of Nature, follow the Seasons of the Year, as cer-

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certainly as some Birds and Plants do. I have often, indeed, wondered, that this Disposition of some Diseases, which is so obvious, has been yet observed but by a few; whereas many have curiously observed under what Planet Plants spring, and Beasts generate. But whatever is the cause of this neglect, I do affirm, That the knowledge of Seasons wherein Diseases are wont to come, is very advantageous for the Physician, both as to the knowledge of the Species of the Disease, and to the manner of extirpating of it; and when this Observation is neglected, the Event of either of these is not good.

These things, though they are not all, yet are they the most considerable, which ought to be observed, in writing the History of Diseases. The Utility of which History, with respect to Practice, exceeds all Estimation in comparison wherewith the nice Discourses, which nauseously stuff the Books of modern Authors, are of no value; for by what more compendious, or other way, can the Curative Indications, or the Morbifick Cause, which we are to oppose, be searched for, than by a certain and distinct perception of peculiar Symptoms: Nor is there any Circumstance so small, or contemptible, as not to serve for both uses: For though we must grant, that there is some variety upon the account of the temperament of Individuals, and the management of the Cure; yet notwithstanding the order of Nature is so equal in producing Diseases, that the same Symptoms of the same Diseases are most commonly found in divers Bodies; and these which were observed in Socrates, in his Sickness, are generally the same in any other Men afflicted with the same Disease; as the universal Characters of Plants are the same in all the Individuals of every kind: He, for instance, that has accurately described a Violet, as to its Colour, Taste, Smell, Figure, and the like, will perceive that that Description agrees almost in every thing with all the Violets in the whole World.

And, indeed, I think the chief reason why we still want an exact History of Diseases, is because most suppose, that they are only the confused and disordered Effects of Nature ill defending her self; and, that he labours to no purpose, who endeavours a just Narration of them.

But to return to the Business: A Physician may as certainly take the curative Indications from the smallest Circumstances of the Disease, as he does the Diagnostick from them: And therefore I have often thought, if we had an exact History of every Disease, we should never want a Remedy suitable to it, the various

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various Phenomena of it plainly shewing the way we ought to proceed in ; which Phenomena, if they were carefully compared one with another, would lead us to those obvious Indications, which are taken truly from Nature, and not from the Errors of Fancy.

And by these Means and Helps, the excellent Hippocrates arrived at the top of Physick, who laid this solid Foundation for building the Art of Physick upon, viz. Nature cures Diseases. And he delivered plainly the Phenomena of every Disease, without pressing any Hypothesis for his Service, as may be seen in his Books of Diseases, Affections, and the like. He also delivered some Rules gathered from the Observation of that Method that Nature uses in promoting and removing Diseases ; such are his Prænotiones, his Aphorisms, and the like : And of these things consisted the Theory of the Divine old Man, which was not drawn from a vain and lascivious Fancy, like the Dreams of sick Men, but it exhibited a legitimate History of those Operations of Nature, which she produces in the Diseases of Men. And now seeing his Theory was nothing else but an exquisite Description of Nature, it was very reasonable, that in practice, his only Aim should be to relieve her when she was oppressed, by the best means he could ; and therefore he allowed no other Province for Art, than the succouring of Nature when she was weak, the restraining her when she was outrageous, and the reducing her to order, and to do all this in that way and manner whereby Nature endeavours to expel Diseases ; for the sagacious Man perceives that Nature judges Diseases, and does in all, being helped by a few simple Forms of Remedies, and sometimes without any.

The other Method whereby, in my Opinion, the Art of Healing may be further promoted, consists of a fixed and perfect Method of Healing, such an one I mean, which has been sufficiently strengthened by a great number of Experiments, and has been found able to cure this or that Disease ; for I do not think that it is enough to publish particular Successes either of a Method or Remedy, if neither one nor the other has been found to attain universally the end in all, at least the Circumstances being so and so ; for I declare, that we ought as certainly to know that this or that Disease may be cured, if we answer this or that Intention ; as we certainly know that this or that Remedy will answer this or that Intention, which though not always, yet most commonly answers our Desires : so we purge with Senna, and cause Sleep with Poppies. But I do not deny that the Physician ought to mind carefully the particular Events both of
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Method and Remedy, which he uses in the Cure of Diseases, and to lay them up for use, both to ease his Memory, and to render him more Skillful, so that at length he may establish a Method, from which he need not recede a whit in the Cure of this or that Disease; but the publishing of particular Observations is not, in my Opinion, so beneficial: For if the Observer designs only to acquaint us, that this Disease was once or oftner cured by this Remedy, what Advantage, I pray, will it be, that one unknown Medicine is added to the almost infinite heap of celebrated Medicines? But if I laying aside all other forms of Medicines, wholly addict my self to this, ought not the virtue of it to be approved by a great many Experiments? and are not a great many Circumstances to be weightied respecting the Sick, and the Method, before we can gain any Fruit by a solitary observation? If the Medicine always succeed with the Observer, why does he take up with particulars, unless he distrusts himself, or think he may easier impose upon the World by piece-meal? but how easie it is to write large Volumes of this kind, every one that is but little conversant in Practice knows: And on the contrary, how difficult it is to continue a perfect Method of Healing in all Diseases? If but only one in an Age had treated but of one Disease in this manner, the Art of Healing, which is the Physician's Province, had come to as great Perfection, many Years ago, as our mortal Condition would have allowed of. But, which is our great misery, we long ago forsook our ancient and skillful Guide, Hippocrates, and the ancient Method of Healing, founded upon the Knowledge of conjunct causes, which may be certainly known, so that the art which is now exercised, contrived by men given to quaint Words, is rather the Art of Talking, than of Healing. But that it may not be thought that I speak this rashly, I beg leave to make a little Digression, that I may prove, that the remote causes which take up the vain Speculations of curious Men, and wherein they triumph, are wholly inservicable, and that only conjunct causes can be known by us, & that the curative Indications are to be taken only from these.

We must therefore observe, That if the humours are retained longer in the Body than they ought, either because Nature cannot concoct them, and afterwards expel them; or because they have contracted a Malignick Disposition, by this or that constitution of the Air: Or lastly, because they are infected with some Venous. By these, I say, and the like ways, the said Humours are exalted into a substantial form or Species which discovers

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it self by this or that disorder, that is agreeable with its own Essence; and these Symptoms, though to the less wary they may seem to arise from the Nature of the Part which the Humour possesses, or from the Nature of the Humour, before it has put on this Species; yet they are really Disorders proceeding from the Essence of the said Species newly raised to this degree, so that every specifick Disease is a Disorder arising from this or that specifick Exaltation, or Specification of some Juice in the Body. Under this kind may be comprehended the greatest Part of Diseases, that have a certain Type or Form, and Nature is as methodical in producing and ripening these, as of Plants and Animals: For as proper and peculiar Affections belong to every Plant and Animal, so it is in every Exaltation of any Juice, when it has broke out into a Species. We have a clear instance of this in those Species of Excreescences, which Trees and Shrubs emit, either upon the account of the perversion, and depravation of the Nutricious Juice, or by other Causes, in the form of Moss, or Mistletoe, Mushrooms; and the like; all which are Essences or Species plainly different from the Tree or Shrub they grow on. And, indeed, he that shall exactly consider those Phenomena that accompany a Quartan Ague, viz. That it most commonly comes about Autumn; that it keeps a certain Order, repeating its periodical Revolutions, as certainly as a Clock strikes, unless the Order of it be disturbed by some extrinsick thing; that it begins with shivering, and a notable Sense of Cold, which is succeeded by a sensible Heat, which at length ends in large Sweats. And lastly, That this Disease, whomsoever it invades, is seldom cured before the Vernal Equinox: He, I say, that shall exactly weigh all these things, may as reasonably believe, that this Disease is a Species as a Plant is so, which in like manner springs out of the Ground, flowers, and dies, and in other things is affected according to its Essence. For it cannot be easily imagined why this Disease should arise from a Combination of Principles, or evident Qualities; whereas a Plant is reckoned by all a Substance and distinct Species in Nature, though we do not deny, that whereas every Species of Plants or Animals, excepting a very few, subsist of themselves; but that the Species of Diseases depend on those Humours from whence they were generated.

But though it appears from what has been said, that the Causes of most Diseases are wholly inscrutable, yet the Question how they may be cured, may, notwithstanding, be resolved; for we dis-

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course here only of the remote Causes; and any one may see, that the curious Speculators of remote Causes lose their Labour, whilst they endeavour to understand them, though Nature oppose; and yet they condemn the mediate and conjunct Causes that are near at hand, which it is necessary to know, and may be so without such Trifles; for they offer themselves plainly to the Understanding, or may be discovered by the Testimony of the Senses, or by others Anatomical Observations made long ago. And as it is plainly impossible that a Physician should understand those Causes of Diseases, which have no manner of Commerce with the Senses, so neither is it necessary; for it is sufficient if we know the immediate rise of the Disease, and such Effects and Symptoms of it, as may enable us to distinguish exactly between this and another Disease not unlike it: In a Pleurisie, for instance, he will weary himself in vain, and will not be able to understand the ill Disposition, and the incoherent Texture of the Blood, which is the first Origin of it: But he that rightly knows the Cause whereby it is immediately produced, and can distinguish it from all other Diseases, will as certainly cure it, though he neglect the trifling and unprofitable search after remote Causes: But this is by the bye.

But now if any one should ask whether to the two foresaid things that are wanting in Physick, namely, a true and genuine History of Diseases, and a certain and confirmed Method of Cure, a third ought not to be added, viz. the invention of Specifick Remedies. I agree with him, the Method seems to me most commodious for curing acute Diseases, in doing which, when Nature has appointed some certain way of Evacuation, whatever Method assists her in promoting the said Evacuation, necessarily conduces to the healing of it. But it were indeed to be wished, that the Sick might arrive to Health by a nearer way, by the help of Specificks, if any such can be found, and which is of greater moment, may be placed out of the dangers which follow those Errors, whereinto Nature often and unwillingly falls, how powerfully and learnedly soever she may be succoured by the Physicians Assistance.

But as to the Cure of Chronical Diseases, though I do not at all doubt, that a greater progress may be hoped for from a Method alone, than can be presently imagined, yet it is very manifest, that that is wanting in the Cure of Chronical Diseases, chiefly for this reason, viz. because Nature has not an effectual Method in these Diseases, to eject the morbidick Matter

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as in Acute, whereby, we assist, and aiming at the right Mark, the Disease may be cured. In conquering therefore a Chronick Disease, he may deservedly be call'd a Physician, that has such a Medicine as is able to destroy the Species of the Disease, nor he who only introduces from the first or second Quality some new one in the room of the former, which may indeed be done, and the Species not extinguish'd: For instance, He that is afflicted with the Gout, may be heated or cooled, and yet the Gout may be as violent as ever; for Specifick Diseases are not more immediately cured by that Method, wherewith only different Qualities are introduced, than a Fire is extinguish'd by a Sword: For what, I pray, can Heat, Cold, Moisture, Siccity, or any other of the second Qualities that depend on these signify as to the Cure of a Disease, whose Essence consists of none of these? If any one should object here, that we had long ago a sufficient number of Specifick Remedies, this very Man, if he will make diligent search, would be soon of another Mind; for the Peruvian Bark is all the Specificks we have. For there is a vast difference betwixt those things which answer specifically to this or that curative Indication, which if we attend well to, the Disease may be cured, and such things as cure this or that Disease specifically and immediately, no respect being had to this or that Intention, or curative Indication. For instance, Mercury, and the Roots of Sarfa, are commonly accounted Specificks in the French-Pox; and yet they ought not to be counted proper and immediate Specificks, unless it can be proved by sufficient Arguments, that Mercury without Salivation, and Sarfa without sweat, have performed the business; for in the same manner other Diseases are cured with other Evacuations, and yet the Remedies that are used do no more immediately conduce to the Cure of those Diseases, which are cured by those Evacuations, for the procuring which such Remedies are very properly designed, than a Lancet for a Pleurisie, which, I suppose, no one will call a Specifick in this Disease.

Therefore Specifick Medicines, if they are restrained to this our Sense of them, do not fall to every Man's share; and yet I do not at all doubt, but out of that abundant Plenitude, with which Nature over-flows, by the appointment of the excellent Maker of all things, care is taken for the Preservation of all, by the Cure of those great Diseases which afflict Men, and that near at hand in every Country. And indeed it is to be lamented, that the Nature of Plants is no better known to us, which

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seem to me the chiefest of the *Materia Medica*, and to be the likeliest to afford such Remedies as we have now discoursed of. For parts of Animals may seem to agree too much with the *Humane Body*, and Minerals differ too much; upon which account the Minerals answer, I confess, Indications more powerfully than either things taken from Plants or Animals, but not specifically in the Sense and manner we have mentioned. I have spent much time in the search after these things, but have not succeeded so well, as that I may prudently publish the result.

But though Plants please me best, yet I would by no means condemn those excellent Medicines taken from another Tribe, which have been found by the Industry and Labour of Men, of this, or any other Age, to answer Inventions well. Amongst these Dr. Goddard's Drops claim the first place. They are prepared by the Learned and diligent Searcher after Method and Remedies, Dr. Goodal: the Efficacy and Vertue whereof for attaining the end to which they are commonly directed, I prefer before all other volatile Spirits whatever.

To conclude: Having in this Introduction promised to give a Specimen of those things, which I endeavoured to the increase of this Art, I will now endeavour to fulfil my Promise in delivering the History and Cure of acute Diseases; In doing which I am very sensible that I shall expose to the Lazy and Ignorant, all the Fruit of those things which I have laboured for in Body and Mind, through the better part of my Life: But I sufficiently understand this ill-natured Age, and I expect therefore to receive nothing but Reproaches, and that I should have much more advanced my Fame, if I had contrived some vain and fruitless Speculation: But be it so, I expect my Reward elsewhere. If any one should here object, That others that are as much conversant in Practice as I, are not of my Mind: It does not concern me to enquire what others think, but to propose faithfully my own Observations; In doing which, I beg the Reader's Patience, not his Favour; for the thing it self will shortly show, whether I have acted sincerely, or whether I have been a Man-slayer; only I beg pardon for that I have not so accurately described the History and Cure of Diseases, as I proposed; for I do not pretend to have compleated the Work, but have encouraged those of better Parts to undergo hereafter, what I have now imperfectly handled.

One thing yet remains, whereof the Reader is to be admonished, viz. That I do not intend to enlarge the following Treatise with a great number of particular Observations, whereby I may give

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give a Reputation to the Method there delivered: For it would be to no purpose, and nauseous to repeat those things singly, which have been treated of together. I count it sufficient at the end of every general Observation, at least as it respects the late Years, to add here and there a particular Observation, wherein the Substance of the preceding Method is contained: and I declare, That no general Method has been published by me, which has not been established by repeated Experience.

He will be disappointed that expects a great number of Remedies and Forms here: the Physician must use those according to his Judgment that the occasion requires; it is sufficient for me to mention by what Indications he must work, and in what order and time: For the Practice of Physick chiefly consists in this, viz. in being able to find the genuine Indications, and not Remedies to answer them; and they that have not observed this, have instructed Empiricks to imitate Physicians.

But if any one objects, That in some things I have not only renounced the Pomps of Medicines, but have proposed such Remedies as are scarce reducible to the Materia Medica, so simple and inartificial are they. But in this, I suppose, I shall only displease unthinking People; for the Wise know that all things are good that are useful, and that Hippocrates, when he proposed the use of Bellows in the Thack Passion, and nothing for a Cancer, and the like, which may be seen in almost every Page of his Writing, deserved as well for his Medical Art, as if he had filled all with pompous Forms of Remedies.

I designed also to have treated of Chronical Diseases, at least, of those that I had been more conversant with; but it being a great Task, I will omit it for the present, and am willing to see first how these things will be received.

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 O F
 P H Y S I C K.

S E C T. I. C H A P. I.

Of Acute Diseases in general.

REASON dictates; if I judge right, that a Disease is nothing else but Nature's Endeavour to thrust forth with all her might the Morbifick Matter for the Health of the Patient, tho' the cause of it be contrary to Nature: For seeing it has pleased GOD, the Governor of all things, that Human Nature should be fitted to receive the various Impressions that come from abroad, it could not be, but it must be subject also to many Diseases, which partly proceed from Particles of Air ill agreeing with the Body, which when they have insinuated themselves into it, and are mixed with the Blood, affect the whole with a morbifick Contagion, partly from the various ferments or putrefaction of Humours, which are detain'd in the Body beyond their due time, because it was not able to digest or evacuate them, ei-

ther upon the account of their bulk, being too great, or the incongruity of their quality. These Circumstances being so nearly joined to the Human Essence, that no Man can clearly free himself from them, Nature provided for her self such a method, and concatenation of Symptoms, as that she might exclude the peccant matter, thereby, which would otherwise ruine the whole Fabrick; and she would much oftener than she does, attain Health by these harsh means, if she were not forced out of her course by the Ignorant: But though she be left to her self, she destroys the Man, either by doing too much or too little for her self, and so obeys resistless Fate, to which we are all indebted, according to the saying of *Sæpius*.

*A Law eternal does Decree,
That all things born should mortal be.*

But to confirm what I have said by an instance or two; what, I pray you, is the *Plague*, but a complication of Symptoms, by which Nature uses to cast out the malignant Particles, by Impossthumes in the Emunctories, or other eruptions that were drawn in by the Air? What is the *Gout*, but Nature's contrivance to purifie the blood of Old Men, and to purge the deep parts of the Body, to use *Hippocrates's* Phrase; And the like may be said of many other Diseases, that are perfectly formed. But Nature performs this Office sometimes quicker, and sometimes slower, according to the different methods she uses to exclude the morbidick Cause; for when she requires the help of a *Fever*, whereby she may be able to separate the vitiated Particles from the Blood, and afterwards expel them, either by Sweat, a Loosiness, or some Eruptions, or the like Evacuations, the whole business is done in the mass of Blood, which is a thin and fluid body, and that by violent motions of the parts; therefore it is absolutely necessary that it should not only be determined suddenly, either for the Health or Death of the Patient, viz. as Nature can either critically dissolve the morbidick Matter, or is oppressed and vanquished thereby, but also that it should be accompanied with worse and more vehement Symptoms. And of this sort are those Diseases, which are called *Acute*, which move to their state quickly, and with danger. And tho' it be not so proper, yet it is as true,

to say, that those Diseases are to be accounted *Acute*, which tho' with respect to the Paroxysms taken together move slow, but with respect to one particular Fit, quickly attain their end. Of this sort are all intermitting *Fevers*; but when the containing Matter of the Disease is of that nature, that it cannot have the assistance of a *Fever*, for the universal separation of it; or when this kind of Matter is fixed to any part which is unable to exclude it, either upon the account of its conformation, as it is in the morbidick Matter of a *Palsie*, that the Nerves are stuffed with, and in the suppurated Matter in the Cavity of the Breast of those that have an *Emphyema*; or by the defect of the Natural Heat and Spirits, as when Flegm falls upon the Lungs of those that are weakened by Age or a long Cough: Or lastly, upon the account of a continual Flux of new matter, wherewith the vitiated Blood, which is only disposed to carry it off, does oppress, and overwhelm the Part: I say, in these Cases the Matter is very slowly, or not at all, concocted; and so Diseases that proceed from such unconcocted Matter are, and are called *Chronical*; therefore from these two principals, that are contrary one to the other, concerning which we have now treated, some *Acute* and some *Chronical Diseases* arise.

As to *Acute Diseases*, which I intend to treat of now some proceed from a secret and inexplicable Alteration of the Air, infecting Mens Bodies: nor do they at all depend on a peculiar Crasis of the Blood and Humors, any otherwise than the occult influence of the Air has imprinted the same upon them. They continue as long as this secret Constitution of the Air, and no longer, neither do they come at any other time: These are called *Epidemicks*.

Other *Acute Diseases*, arise from this or that particular Irregularity of particular Bodies, which because they are not produced by a general cause, do not therefore invade many at once: Besides, this sort comes every Year, and at any time of the Year, excepting those we shall mention, when we come to speak particularly of this kind. These I call *Intercurrent* or *Sporadick*, because they happen at any time, when *Epidemicks* rage. I begin with *Epidemicks*, and first of all propose a general History.

CHAP. II.

Of Epidemick Diseases.

I Think nothing will cause such Admiration in him that diligently views the Province of Physick, as the great Variety of *Epidemick Diseases*; not so much for that they resemble the various Seasons of the same Year, as that they are like the divers Constitutions of Years, that vary one from the other, and depend on them. And this manifest difference of these Diseases will plainly appear by their proper and peculiar Symptoms, and the different method which each requires, tho' these Diseases may seem alike to the Unwary, because in some sort they do agree to outward appearance, yet if you seriously consider, they are very different; and it is hard to say whether a diligent search, for which the short Life of one Man is not sufficient, would teach us, that *Epidemical Diseases* circle about in one continual series, or whether they come disorderly, according to the occult Diathesis of the Air, or the inexplicable course of Times. But this I am sure of by many Observations, that the above-mentioned Species of Diseases, especially continual *Fevers*, do very much differ; for that Method which is successful one year, may perhaps be destructive another. And when I had once happily met with a Method of Cure, which this or that kind of *Fever* did particularly require, I scarce ever failed of Success, respect being had to the Temperament, and Age, and the like, till this Species was extinct; but when a new one did arise, I was in doubt which way I should steer, so as to be serviceable to my Patient; and unless I took great Care, and used my utmost Endeavours, I could scarce help, but that one or two of those I had first in hand would be in great danger, till I had found out the *Genius* of the Disease, and then I could again proceed readily to the curing of it.

And tho' I have observed with as much diligence as possibly I could, the various Disposition of divers Years, as to the manifest Qualities of the Air, that from thence I might

might learn the Causes of this great variety of *Epidemical Diseases*, yet I have received no Benefit thereby; for I perceive that Years that do agree as to the manifest Temper of the Air, are infected with various Diseases; and so on the contrary. And thus it happens there are many Constitutions of Years that arise neither from Heat nor Cold, nor Moisture nor Drought, but proceed from a secret and inexplicable alteration in the Bowels of the Earth, whereby the Air is contaminated with such *Effluvia* as dispose Bodies to this or that Disease, as long as the same Constitution prevails, which at length in a certain space of time withdraws, and gives way to another. Every once of these general Constitutions is accompanied with a *Fever* proper and peculiar to it self, which never appears at any other time; therefore I call these *Fevers* stationary.

Moreover, there are particular Temperaments of the same Year, as I may say, wherein, tho' according to the manifest Qualities of the Air, those *Fevers* that follow the general Constitution of the Year are more or less Epidemical, or come sooner or later; yet chiefly these *Fevers* that come every Year, (which therefore we called *Intercurrents*) owe their Rise to this or that manifest Temper of the Air, viz. a *Pleurisie*, *Quinsie*, and the rest of this sort, which most commonly proceed from sudden Heat, following presently a long and severe cold Season. Therefore 'tis probable, that the sensible Qualities of the Air may be Instrumental in producing the *Fevers* which exert themselves in every Constitution; but not as to those that are peculiar to any one Constitution: We must confess, that the above-mentioned Qualities of the Air do more or less dispose our Bodies to generate this or that *Epidemick Disease*, which is likewise to be said of any Error in the six Nonnaturals.

But we must take notice, that some *Epidemical Diseases* in this or that Year are regular, and have the like *Phænomena* and Symptoms in almost all that are infected with them, and go off in the same way and manner; therefore a true and certain History of *Epidemick Diseases*, is to be learnt from these, as being most perfect of the kind.

There be other Diseases of other Years, which tho' they be Epidemical, yet are they so irregular, that they cannot be comprehended under any form, and are in-

deed ill-conditioned upon the account of the uncertain variety of Symptoms, and their certain changeableness, and as to the Method whereby they are cured. This Great disparity arises from hence, *viz.* because every Constitution produces *Diseases* that are very much unlike those of the same kind, under another Constitution, which not only happens in *Fevers*, but in many other *Epidemick Diseases*.

And this is not all, for there is a variety of wanton Nature, that is of a more nice speculation, *viz.* that the same *Diseases* should vary often under one and the same Constitution, as to its beginning, State, and Declination, which is of so great Consequence that the Curative Indications are to be omitted or us'd, according as the Disease is dispos'd.

Moreover we must take notice, that *Epidemick Diseases* must be divided into two ranks, *viz.* *Vernal* and *Autumnal*; and tho' they may happen at any other time of the Year, yet if they do, they belong to that rank they are nearest; for so it falls out sometimes, that the Temper of the Air does so much agree with some one *Epidemick Disease*, that by the help of it, it comes before its time: And on the contrary, 'tis deferr'd when there is no suitableness; so that it does not invade the Body predispos'd till some time after: Therefore when I mention the Spring or Autumn, I do not exactly mean the *Æquinox*, whether *Vernal* or *Autumnal*.

Some *Epidemick Diseases* begin early in the Spring, *viz.* in *January*, and encreasing by degrees, come to their height about the *Vernal Æquinox*, then decrease and vanish about the *Summer Solstice*, saving that a very few afterwards may now and then happen. Of this sort are the *Measles*, and *Spring-Tertians*, which tho' they appear somewhat later, *viz.* in *February*, yet they also withdraw at the approach of the *Summer Solstice*: But others that begin in the Spring encrease daily, and do not come to their State till the *Autumnal Æquinox*, which being past, they begin to retreat, and at length are extinguish'd by the cold of *Winter*. Of this kind is the *Plague* and *Small-Pox*, in those Years they are *Epidemical*. The *Cholera Morbus* belongs to the Family of *Autumnal Epidemics*; it begins in *August*, and finishes its course in the space of a Month: There are other Diseases that begin at the same time, but
continue

Of Epidemick Diseases.

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continue till Winter; for instance, the *Bloody-Flux* and *Autumnal-Fevers*, both *Tertian* and *Quartan*; all these lose the Name and Nature of Epidemics in the space of two Months most commonly, but some are afflicted with them sometimes longer, sometimes not so long.

But in particular, as to *Fevers*, we must take notice, that the greatest part which are continual have yet no Name allotted them, as they proceed from the influence of a general Constitution, but they borrow those Appellations they are known by from some remarkable Alterations imprinted upon the Blood, or from some evident Symptom; and upon this account they are called *putrid*, *malignant*, *spotted*, and the like; but forasmuch as every Constitution is prone to propagate some other Diseases of Note at the same time more Epidemical, besides the *Fevers* it produces, of which sort is the *Plague*, *Bloody-Flux*, *Small-Pox*, and the like, I cannot see why such *Fevers* should not rather take their Name from the Constitution, as it favours the Production of either of these Diseases at the time when they appear, than from any alteration of the Blood, or any particular Symptom, which may as well agree with *Fevers* of another kind. *Intermittents* take their Names from the Intervals between the Fits; and this is sufficient to distinguish them, if the Seasons of the Year wherein they happen, *viz.* *Spring* or *Fall*, be considered; but some of these have no very visible Character, whereby they may be distinguished, tho' they really participate of the Nature of *Intermittents*; as when *Autumnal Intermitting Fevers* come early, *viz.* in *July*, and are common, they do not presently put on their own Shapes, (which is customary in *Spring intermitting Fevers*) for they imitate continual *Fevers* so well, that 'tis hard to distinguish them. But the violence of the Constitution being a little quelled about the end of Autumn, they put off their Disguise, and then openly appear to be *Intermittents*, either *Tertians* or *Quartans*, as indeed they were were really at first: And if this be not carefully observed, we shall be deceived in our Prescriptions, much to the prejudice of our Patients, while we mistake *Fevers* of this kind, which are to be accounted *Intermittents* for real *Continual Fevers*.

Moverover, we must diligently observe, that when many of these Diseases infest the same Year, one is more predominant, and all the rest are as it were under it, and

don't rage so much at that time, so that as this encrease they decrease; and when this decreases, they encrease; and so by turns they vex poor Mortals, as the *Genius* of the Year, and the sensible Temper of the Air favour most this or that Disease; but that Disease which rages most, and is most deadly about the Autumnal Equinox, names the Constitution of the whole Year: for it plainly appears, that whatsoever Disease prevails over the rest at that Season, will have the dominion over the rest for the whole Year, to whose *Genius* all the Epidemics that are Contemporaries with it accommodate themselves, as far as it consists with their nature: For instance; When the *Small-Pox* did rage, at the same time the *Fevers* that did wander here and there did plainly partake of that Inflammation, which produced the *Small-Pox*; for both Diseases began after the same manner, and there was great likeness betwixt the proper Symptoms of each, excepting the Eruption of the *Small-Pox*, and the rest that depended on it, as it manifestly appear'd by that great inclination to spontaneous Sweats and Spitting, which were proper to both. In like manner, when the *Bloody-Flux* chiefly prevailed, the *Fever* that raged that Year was not a little like it, (only it did put off the Morbifick Cause by Stool, and some other Symptoms arose from thence) which did manifestly appear, for that the beginning of both were alike, and those that had either Disease were enclined to *Apthæ*, and did mutually partake of the same Symptoms. And truly the *Bloody-flux* we now speak of was that very *Fever* introverted which did exonerate it self into the Intestines, and was put off that way. It is to be noted, that the chief Epidemick that rages about the Autumnal Equinox recedes at the approach of Winter, and the Epidemics of a lower rank exert themselves until the chief Epidemick of the Year returns and suppresses them.

Lastly, we must observe, that when any Constitution produces various species of Epidemics, that each species differs in kind from those that have the same Name, but are under another Constitution: And how many soever peculiar Species there be that invade under one and the same Constitution, they all agree in the common and general Cause that produces them, viz. in this or that peculiar Diathesis of the Air, and by consequence, how much soever they differ one from the other, as to their Type and

Specifick

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specifick Form, yet the Constitution that is common to all reduces the Subject-matter of Particulars to the like Condition and State; so that the chief Symptoms which do not belong to particular manner of evacuation, are alike in all: And in this they all agree, *viz.* they equally increase and decrease at the same time. Moreover, we must observe that in those Years wherein various Species of these break forth. they all make an Assault at the same time, and after the same manner, and have the same Symptoms at their first invasion.

Hence we may learn the various and accurate Method Nature useth in generating Diseases, which I believe no Man has hitherto sufficiently observed: And from hence it appears (seeing the specifical differences of Popular Diseases, *viz.* *Fevers*, arise from the Secret Constitution of Years) that those labour in vain who deduce the Reasons of divers *Fevers*, from a morbifick cause reserv'd in the Body: For it is evident that if any Person who is very well, travels to some parts of this Kingdom, he will be seized with the *Fever* that rages there within a few days and yet it is scarce credible that any manifest Change should be imprinted by the Air upon the Humours of this Man in so short a time. Nor is it less difficult to accommodate general Rules, and to fix some certain Bounds, which we may not pass in the Cure of these *Fevers*. Therefore in so great Uncertainty, I think it best to pause a while, when any new *Fever* arises, especially, to proceed gently, and with deliberation, to great Remedies, and in the mean while to observe diligently the *Genius* of it, and likewise those things that do either good or Harm, that we may avoid the one, and chuse the other.

In a word, as it is very hard to reduce all the Species of Epidemicks into Classes, according to the variety of their *Phænomena*, and to decipher the Idiopathick Characters of each, and to accomodate a Method of Healing particular to every one; so also, because they do not invade in any certain Series of Years, (at least not yet known) perhaps the Age of one Physician will not be sufficient to collect an exact *apparatus* of Observations of them. But tho' this Labour be so tedious, we must perform it before we can justly boast of any thing we have done fit to be remember'd in explicating the various series of these Diseases.

But how may we give an account of the distinct Species of Epidemicks, that do not only (at least as it appears to us) invade by chance, but also for one Year, or one certain

tain Series of Years, are of the same *Genius*, in another Year are distinguish'd *in specie* one from another? Why, in this case no Method ever seem'd more fit to me than that which described them in the order they succeeded one another for a sufficient number of Years; which that I may do according to my own Model, I will faithfully deliver to the Learned World the History and Cures of those Epidemicks (as well as I could possibly collect them from the most accurate Observations) that did rage from the Year 1661, to the Year 1676. *viz.* for the space of Fifteen Years: For it seems to me plainly impossible to perform this Work by assigning the Causes of the Rise of them to the manifest qualities of the Air, much less to some particular Discrasie in the Blood and Humours, unless as it rises from a secret influence of the Air.

Moreover, it is also impossible to deliver the Species of various Epidemicks, which arise from specifick Alterations of the Air, tho' it may seem very easie to those who are wont to give Names to *Fevers*, according to their notions ill-grounded upon the Speculations of those Alterations which may arise in Humane Blood and its Humours; for when we do not follow Nature, the best Guide, but allow our selves to guess, there will be so many Species of Diseases as we can repeat; and in the mean while we take that License which no Man will grant to a *Botanist*, from whom we require the Testimony of the Senses for his Relation of Plants, not a speculative Discourse, tho' he may be excellent in this particular, and exceed others.

I do not assume so much to my self, as that I would be thought to have accomplish'd what I now treat of, perhaps I have not so much as repeated all the Families of Epidemicks: Nor can I say that these Diseases which in the Years past, whereof I now treat, did mutually succeed one another in that order we shall mention hereafter, will likewise continue to do so for Years to come. All that I pretend to is, to declare how this thing has been of late, and to confirm by the Observations of some few Years what relates to these Regions, and this City wherein we live, that I may offer my Mite for the beginning a Work, which if I am not mistaken, will be very much to the advantage of Mankind, when it is perfected by Posterity, who may traverse the whole Series of Epidemicks in Years to come.

C H A P. III.

*The Epidemick Constitution of the Year
1661, 62, 63, 64.*

IN the Year 61, the Autumnal Intermitting Fevers, which for some Years past prevail'd, did again break forth afresh, (especially obstinate *Tertians*) about the beginning of *July*, and daily encreasing, fiercely rag'd in *August*, and in many places whole Families being seiz'd, they were very Mortal, and then decreasing by degrees, they were extinguish'd by the Cold of Winter coming upon them, so that there was very few in *October*. The Symptoms which accompanied this *Tertain* chiefly, differ'd from the Symptoms of other *Tertians* in other Years, in these things, viz. the Fit was fiercer, and the Tongue was blacker and dryer, and when the Fit was past, the Fever did not clearly go off; the Appetite and Strength were more dejected, and the Fits more inclin'd to double: In short, all the Accidents were worse, and the whole Disease fiercer than was usual in *Intermitting Fevers*. When this Disease seiz'd People that were in years, or those that were of an ill habit of Body, or others that were weaken'd by Bleeding or any other Evacuation, it continued for two or three Months. Some few *Quartans* accompanied the Fevers now describ'd, but both being unable to bear the approach of Winter, (for then they invaded none that were not infected before) withdrew, and were succeeded by a continual Fever differing from the intermitting Autumnals only in this; Those did come at certain times, and This was continual; for they invaded the People almost alike, and those that violently labour'd of either vomited; their External Parts were dry, and their Tongues black, and they were thirsty, and the Morbifick matter of both was readily exterminated at their Declinations by Sweats. It was manifest, this Fever belong'd to the Family of *Autumnal Intermittrients*, because it rarely appear'd in the Spring, and it

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was a sort of Compendium of the Intermittents, and on the contrary every one of their Fits seem'd to be a Compendium of this *Fever*. So that the difference chiefly consists in this, *viz.* That the *Continual Fever* prefected its Effervescence, once begun, with the same degree of heat; but the *Intermittents* perform their business by parts, and at several times. I cannot say how long this *Fever* has prevail'd, for hitherto I have had enough to do to attend upon the general Symptoms of *Fevers*, for as yet I have not been able to distinguish them according to the various crasis of Years, or according to the various seasons of the same Year. This I certainly know, That there was but one species of a *Continual Fever* till the Year 1665, and the *Autumnal Intermittents* which were frequent till this Year, afterwards became more rare.

But to return to the business: That *Tertian Fever* which in the said Year so much prevail'd, contracted it self into a less compass when the Year was over; and in the following Autumns the *Quartans* exceeded, and other Epidemics, as long as the Constitution of the Air remain'd; but after Autumn, the *Quartans* always deceasing, the *Continual Fever* (which through all this time appear'd a little) now violently raged till Spring, at which time the Vernal *Intermittent Fevers* succeeded; which going off likewise about May, the *Small Pox* here and there appear'd, and disappear'd again at the approach of the Autumnal Epidemics I mean the *Continual Fever*, and the *Quartans*. And in this order the Epidemic Diseases follow'd one another, and pass'd through the whole constitution of the Air. I shall particularly treat of these, *viz.* the *Fever*, and the *Vernal* and *Autumnal Intermittents*, which chiefly infested this Constitution.

I will begin with this *Fever*, which seems to me the chiefest of all, because Nature acted in it more regularly than in any other, both in bringing the febrile Matter to a due Concoction, and by casting it forth at a certain appointed time. Moreover, forasmuch as those Constitutions of Years that produce Autumnal Intermittents, much oftner returning *communibus Annis*, than those that cause other Epidemics, it necessarily follows, That the *Continual Fevers* that accompany them should often happen.

Besides the Symptoms that belong to other *Fevers*, this was also accompanied with these following. The Sick most com-

commonly was violently ill, he vomited, his Tongue was dry and black, there was a great and sudden dejection of the Strength, the External parts were dry, the Urine always thick, or thin, both were equally a sign of Crudities: In the Declination of the Disease there was a Loosness, (unless the Physician chanced to prevent it at the beginning,) which prolong'd the Disease; but according to its own Nature and Genius, it went off about the 14th or 21st day, at which time it was expell'd by Sweat, or rather gentle breathing; and the Signs of Concoction appear'd most commonly in the Urine about this time, and not before. Other Symptoms superven'd when the Disease was unskilfully handl'd, but these and the whole Genius of it will more clearly appear from the peculiar Method that heretofore I accommodated to this Fever, which therefore I will transfer nither, (at least as much as concerns the business) as I publish'd it long ago, at which time I did not know there was any other kind of Fever to be found any where.

C H A P. IV.

*Of the Continual FEVER of the
Year 1661, 62, 63, 64.*

FIRST, I observe, That in the inordinate Commotion of the Blood, the Cause, or Companion of this Fever, is started up by Nature, either that some Heterogeneous Matter contained in it, and offensive to it, should be cast out, or that the Blood should be some way alter'd.

And in this business the word *Commotion* pleases me best, because it is more large and general than either *Fermentation* or *Ebullition*, for it prevents the occasion of a vain dispute about terms, that perhaps words of that kind may seem to countenance, though they may admit of an Explication that is not incommodious, yet are they thought something improper by some; for though the Commotion of the Blood may be something like the Fermentation,
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14 *Continual Fever in the Year 1661, &c.*

sometimes like the Ebullition of Vegetable Liquors, yet there are some that think it very much differs from both, and they produce one or two Examples of Fermentation. First, tho' Liquids fermenting are wont to obtain a Vinous Nature, so that a hot Spirit may be drawn from them by Diffillation, and easily turns to Vinegar, which is notably sharp, and yields by diffillation an acid Spirit, yet they say, that neither of these Dispositions has hitherto been found in the Blood.

And they observe, That in Vinous Liquors the fermentation and depuration are finish'd at the same time, and as it were, keep pace together; but the depuration of the Blood in Fevers does not accompany, but follows its Estimation, which they think is manifest even to sight, in a Febrile Fit carried off by Sweat.

But as to Ebullition, the Analogy seems more difficult to them, and which Experience contradicts in many cases, where the Fury of the Blood is not so violent as that it may deserve the Name of *Ebullition*; but be it as will, (for I will by no means engage in these Disputes, seeing the terms of *Ebullition* and *Fermentation* have been very much used among modern Physicians, I will not refuse to use them too, now and then, whilst it is manifest from what has been said, that these words serve only in this Treatise for a clearer Explication of what is to be discours'd of.

Undoubtedly, all sorts of Fevers that are accompanied with Eruptions, make it appear, that this febrile Commotion of the Blood is rais'd for the Secretion of some Heterogeneous Matter, that is contrary to Nature; for that in these, by the help of Ebullition, an Excrement of an ill quality is cast upon the Skin that lay hid before in the Blood.

And I think it is no less probable, that the febrile commotion of the Blood should oftner (not to say oftner) aim at no more than to be changed into some new State and Disposition, and that a Man, whose Blood is pure and untainted, may be seiz'd with a Fever; as we commonly find it happens to healthy People, in whom we find there is no Morbifick Furniture, either as to a *Plethora*, or ill Habit, no unhealthy indisposition of the Air, which may occasion a Fever; and yet notwithstanding, by reason of some notable alteration of the Air preceding, or change of Diet, or of the rest of the Non-naturals, as they are called, such
Men

Continual Fever in the Year 1661, &c. 15

Men are likewise seiz'd with a Fever; and the reason is, because the Blood endeavours to gain a new State or Condition, such as the Air, and manner of Diet requires; not that the irritation of vitious Particles lodg'd in the Blood cause the Fever, tho' I do not at all doubt, but that the Matter that is commonly exerted in the disputation of the Blood after the Febrile Commotion, is vitious, tho' the Blood before was well dispos'd, which is no more to be wonder'd at, than that some part of what we eat should be corrupted and stink, after it has been considerably alter'd in the Body, and sperated from the rest.

Secondly, I reckon, that the true and natural Indications that arise in this Disease shew, that the commotion of Blood must be kept in that degree which is suitable to Nature's purpose, that it do not rise too high on the one hand, from whence great Symptoms flow, nor be depress'd too low on the other hand, whereby the protrusion of the Morbifick Matter may be hindered, or the endeavours of the Blood affecting a new state frustrated; so that whether the Fever arise from some Heterogeneous Matter irritating it, or from the Blood affecting a new Condition, in both cases the Indications are the same. These things being premised, I order the Method of Cure in the following manner.

When I am called to Patients, whose Blood of it self is weak, as it is most commonly in Children, or when it wants Spirits, as in old Age, and in young Men, weaken'd by long Sickness, I forbear Bleeding; for if I should Bleed such, their Blood being already too weak, it would become unfit to perform the business of Depuration, and consequently the whole Mass would be perverted, and the Life of the Patient hazarded, (as when the fermentation of Beer, or any new Liquor is unseasonably stop'd, it is most commonly spoil'd) for Nature can no more associate with the Particles which it has once begun to eject, which tho' they were pure when they were equally mixed with the Blood, are now corrupt, and apt to infect the other Humours. Truly, I know very well, that those that are injur'd by bleeding, are sometimes restored by proper Cordials, the Blood being enabled by them to purifie it self; but Prevention is better than a Cure.

When I am called to those whose Blood is of a contrary Nature, such as is wont to be in young Men of a strong
Con-

16 *Continual Fever in the Year 1661, &c.*

Constitution, and sanguine Temper, I order bleeding in the first place, which cannot here be omitted, without danger, (besides, in some cases to be mentioned hereafter) for otherwise not only *Pleurisies*, *Pneumonies*, and such *Inflammations* may be feared, by reason of the too great ebullition of the Blood, but also on the account of the superfluity and stagnation of the whole Mass.

As to the quantity, I only take away so much Blood as I suppose will free the sick from those Dangers whereunto, as we said, he is obnoxious by the violent commotion of it. Moreover, I regulate the Estuation by repeating Bleeding, or omitting it, by using, or forbidding the use of hot Cordials. And lastly, by keeping the Body loose, or stopping it, as I find that motion high or low.

After bleeding, if it be necessary, according to the above-mention'd Cases, I carefully enquire whether the Sick was inclin'd to Nauseousness, or Vomiting at the beginning of the *Fever*; and if so I presently order a Vomit, unless some great weakness of the Patient, or the tender Age forbid it. Indeed a Vomit is so necessary, when an Inclination to Vomiting went before, that unless that Humour be evacuated, it will occasion many difficult Symptoms, that will obstruct the Physician in performing the Cure, and very much endanger the Sick. A Looseness is the chief and most frequent, which most commonly follows in the declination of the *Fever*, when Vomits were omitted, when they were indicated; for in the progress of the Disease, when Nature has somewhat quell'd the malignant Humour in the Stomach, and thrust it down to the Guts, they are so corroded by a continual Flux of a Sharp Humour from this Fountain in the Stomach, that a Looseness must necessarily follow. But I have taken notice, That in *Inflammatory Fevers*, which are commonly called *Malignant*, a Looseness did not constantly follow the omission of a Vomit, as it did in this *Fever*, tho' such an Inclination to Vomiting went before: But of this Matter more hereafter. This sort of Looseness is more dangerous, because the Sick being much weakned before, is more enervated thereby: besides, which is worst, it happens at the declination of the *Fever*, when the Blood should contract it self, and use its utmost endeavours for finishing Despumation, but is hinder'd by this Evacuation.

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But that you may not doubt that this Humour lodged in the Stomach, unless it be expell'd by a Vomit, will in a short time cause a Looseness; upon enquiry we almost always find, that when a Looseness accompanies this Fever, the Sick was inclin'd to Vomit at the beginning of the Disease, but a Vomit was not given. Furthermore, you may take notice, That tho' the inclination to Vomiting went off long before, yet the Looseness will cease for the most part upon taking a Vomit, if the Sick be able to bear it: But I have frequently observed, That when the Looseness is come, astringent Remedies do little or nothing, either taken inwardly, or outwardly apply'd to stop it.

I commonly use the following Vomit.

Take of Vinum Benedictum six Drams, of Oxy-mel of Squills, and compound-Syrups of Scabious, each half an Ounce; mingle them, make a Vomit.

I order it should be taken two hours after a small Dinner, and that it may work the better, six or eight Pints of Posset-drink may be provided, for these Medicines are dangerous, if they are not washed off; and therefore as often as the Patient Vomits, or goes to Stool, he must take presently a Draught of it, whereby the Gripes will be prevented, and he will Vomit easily.

After a nice view of the Matter cast up by Vomits, which was neither much, nor ill, I often wonder'd how it comes to pass, that the Sick should be so much relieved by it; for as soon as the Vomit had done working, the violent Symptoms, viz. the nausea, anxiety, restlessness, sighing, and blackness of the Tongue, were commonly mitigated, which before afflicted the Sick, and frighten'd the By-standers, so that the rest of the Disease was very tolerable.

It is to be observ'd, That if the Case requires Bleeding, and Vomiting, it is safest to bleed first, for otherwise the Vessels being stretch'd with Blood, there is great danger, lest, by violent straining to Vomit, the Vessels of the Lungs should be broken, and the Brain hurt, the Blood being violently pour'd in and out, and so the Patient may die of an Apoplexy; whereof I could mention some Instances, if it were proper; it is sufficient, that I warn you of the great danger in this Case.

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If any one should ask, at what time of the *Fever* I would give a *Vomit*, I say at the very beginning, if I had my choice, for by this means the Sick may be preserved from those dreadful Symptoms that rise from the filth of those Humours that lurk in the Stomach and Neighbouring Parts, and perhaps you may stop the Disease; at the beginning, which otherwise would encrease to the hazard of the Patient, and become tedious, being nourish'd by the fore-mention'd Humours, which either by reason of their substance pass into the innermost Parts of the Body, and are mingled with the Blood, or because they are kept too long in the Body, wax worse, and put on a venomous quality, which they continually impart to the Blood as it passes by their Nest: And of this, not to go far, the Disease called *Cholera Morbus* is a clear Instance; for sometimes when the vomiting is unseasonably stop'd in that Disease, whether it be by an Opiate, or astringent Medicines, a worse train of Symptoms follow; for the sharp and corrupted Humours being on this account repelled, whose exclusion ought to have been permitted a while, till they were sufficiently evacuated, exert their fury and force upon the Blood, and kindle a *Fever*, which is wont to be irregular, and accompanied with ill Symptoms, and can scarce be cured without a *Vomit*, tho' the Patient do not then *Vomit*.

But if we are called in late, as we are often, so that we cannot assist the Patient at the beginning of the *Fever* by ordering a *Vomit*, yet I have thought it proper to give one at any time of the Disease, if the Patient has strength to bear the working of it: indeed I have given a *Vomit* with good success on the twelfth day of the *Fever*, tho' the Sick had left off vomiting before, and so I have stopped the Looseness, which obstructed the Blood in performing its despiration; and I should not doubt to do it later, unless the Patient, by reason of weakness, cannot bear it.

After Vomiting I always endeavour to quiet the tumult raised in the Humours by the *Vomit*, and therefore I order an Anodyne to be taken at Bed-time, after the *Vomit*.

Take of Red Poppy-water two ounces, of Aqua Mirabilis two drams, of Syrup of white and red Peppies each half an ounce; mingle them, make a Draught.

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But if there be no fear of raising the Ebullition for the future, either by reason of a great loss of Blood, which was taken away in order to the cure, or by frequent Vomiting and Stools occasioned by the Vomit, or by a present Apurexy or weakness of the Fever, or its declining State, then I boldly order a large dose of *Diascordium*, either by itself, or mixed with some Cordial Water instead of the Anodyne above described, and it is really an excellent Medicine, if it be given in a due quantity.

And now, before I leave off discoursing of Vomits, I must acquaint you, that it is by no means safe, at least in this Fever, to give Vomits of *Vinum Benedictum* to Children, or any under Fourteen, no, not in the least quantity: It were to be wished that in the room of this we had some safer Medicine that was as powerful, which might root out the Humour, that always almost threatens a Looseness at the declination of the Fever; at least that we had such a one as would so alter the sharp matter, that it could not occasion a Looseness.

I have indeed been frequently at a stand, when I have visited Infants and Children in a Fever, and have seen an Indication, which perswaded the use of a Remedy that would have cured them, and yet I did not dare to order it, for fear of the ill Consequence; but in grown People I have hitherto observed no hurt proceeding from a Vomit if it were given with the Cautions above-mention'd.

Vomiting being over, I consider whether, notwithstanding the foregoing evacuation, the Blood rages so much that it is still necessary to lessen its effervescence, or whether it be so very low, that it wants to be heightened; or lastly, whether the fermentation, being reduced to a due degree, may be left to itself without danger to the Sick. Of each of these I shall say something.

First therefore, if the Blood ferments so violently that we may reasonably fear the Sick is in danger of a Phrensy, or some other ill Symptom, proceeding from too great an ebullition of the Blood, the day after taking the Vomit. I order the following Glyster,

Take of the common Decoction for a Glyster one pint of Syrup of Violets and brown Sugar each two ounces, mingle them, make a Glyster; and I order it should be repeated upon occasion.

By which, most commonly, the *Blood* being somewhat cooled, its effervescence is sufficiently restrained: But sometimes it is necessary to repeat Bleeding once again, viz. in those of a very sanguine constitution, and in the flower of their Age, or in others who have inflam'd their *Blood* by drinking Wine frequently; but most commonly there is no need of so great a Remedy as is Repeated Bleeding; and excepting the Cases abovementioned, the effervescence may be sufficiently restrained by the use of Glysters; wherefore if the *Blood* boil too much, I order a Glyster every day, or every other day, as the case requires, to the tenth day of the Disease: But if much *Blood* has been taken away, or the Sick is old, I order no Glysters at that time, tho' the *Blood* be very hot; for in these cases, as there is no fear that by the omission of Glysters the Ebullition begun should proceed so far, as that there should be great danger from some violent Symptom; so it is most certain, that by the use of them the strength, and as I may say, tho' less properly the tone of the *Blood* is so much relaxed, especially in old People, (for Glysters are not used so successfully in old People as in young) that Nature is obstructed in her business, but if not much *Blood* has been taken away, then, as I said, I order'd Glysters to the Tenth day, more or less, and sometimes to the twelfth day, especially for those I did not dare to bleed, for some fall into continual Fever after Autumnal Agues, (whether they are tertian or quartan) because they were not purged after the Agues left them; and if such should be bled, there will be danger, lest that Sediment which the preceding fermentation put off, should be again sucked into the Mass of *Blood*, and so should cause new tumults; therefore in this case, instead of Bleeding I use Glysters till the twelfth day, if the Patient be young, and the fermentation too high.

But whether Bleeding be used or not, if the Effervescence be too low, and wants to be stirred up, in this case we must wholly abstain from the use of Glysters, even before the tenth day, and much rather if it be past; for to what purpose should we endeavour any more to restrain the fermentation, which is already too languid? but if after that time, viz. in the declension of the Disease, we should use Glysters, it would be as ridiculous as if any one should

should give too large vent to *Beer* when it is dying; for, by reason of this evacuation Nature is obstructed, so that she cannot attend the separation of the morbidick matter with all her strength; therefore when by proper evacuations the Sick is out of danger from those Symptoms which are occasioned by too great ebullition; or when the Disease is in its declination, the more the Body is bound, the less danger there is, viz. the febrile matter moving gentle to its own concoction: Wherefore if the preceding evacuations have induced as it were a laxity of the Mass of *Blood*, or threaten the same; or if the *Fever* goes off before its due time, or is come to its full period, I do not only leave off the use of Glysters, but think that Cordials are to be given, and presently endeavour to stop the *Belly*.

As to the Cordials, I have found by Experience that the too early use of them has been very prejudicial, viz. bleeding having not been first used, for there is danger, lest the crude matter should fall upon the Membranes of the *Brain*, or the *Like*, or on the *Placenta*, and therefore I always take care that Cordials be not given when no *Blood*, or but very little, has been taken away, and there has been no other considerable evacuation, or when the Sick has not passed the vigor of his Age; for I cannot see to what purpose the *Blood* that is rich enough of it self should be heightened to the Patient's ruine; but rich enough it is, nor wants it Restoratives, as long as considerable evacuations have not weaken'd its innate heat, such Patients are well enough furnish'd with Cordials within themselves, and as to those which come from abroad, they are either unnecessary or else injurious, and therefore I would either reject all, or at least admit only of the smallest; but if the Person be weaken'd by large evacuations, or be aged, I use to give Cordials even at the beginning of the *Fever*, but on the twelfth day of the Disease, things then tending to secretion, I think we ought freely to use hotter Medicines, and indeed a little sooner, if there be no danger of driving the febrile matter upon the principal parts, for at this time the more I heat, so much the more I hasten concoction; nor really can I understand what Physicians would be at, who so often inculcate their Precepts concerning the giving of Remedies, to promote the Concoction of the febrile matter, which they

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often do, being called in at the beginning of the Disease; and yet notwithstanding, at the same time, order such Medicines as qualifie the *Fever*, which is Nature's Instrument, whereby she separates the pure from the impure. By this means wholly imperceptible, she proceeds from the beginning to the height of the Disease, but performs the business more manifestly at its Declination, which may be discerned by the Urine. The Concoction of the febrile Matter denotes no more than the separation of the peccant Matter from the good. Now in the hastening of it, you must not busy your self with I know not what Attempters, but the Effervescence of the *Fever* is to be let alone, so long as the safety of the Patient will permit; but when it tends to the Declination, Secretion being manifest, then we ought to follow it with hotter Medicines, to perform the business sooner and safer. And this is, indeed, to promote the Concoction, whereas Evacuations and Coolers cause delays, and obstruct the Cure, and drive away approaching Health, as I have frequently observed.

If the Fermentation go on well, the Despumation will be perform'd about the fourteenth Day; but if you use any Coolers too late, and thereby lessen the Effervescence, it is no wonder if the *Fever* continue to the One and twentieth Day, and in weak Bodies ill treated much longer.

Moreover, which is worth taking notice of, it sometimes happens, that the Patient, by the use of Glysters, and other Purges, unseasonably order'd about the declination of the Disease, seems a little to be reliev'd and sometimes is wholly freed from his *Fever*, but after a day or two you will perceive not so much the old *Fever* has recover'd Strength, as that a new one has broke out, viz. shaking and shivering presently seizes him, and Heat and a *Fever* soon follow about to run the same Course above describ'd, unless it happen to turn to an *Ague*; in this Case the Patient must be manag'd as if he had no *Fever* before; and the same Method is to be repeated; for Despumation which must follow Ebullition now begun, will not be finish'd in less time than before mention'd, viz. fourteen Days; how tedious soever it may seem to the Patient, much weaken'd by the former Disease, to wait so long for Health.

The Cordials I order, are such as I will mention by and by: Those that are moderate, I use at the beginning

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of the Disease, when the Heat is extream, proceeding always by degrees to the use of hotter, according to the progress of the Disease, and the degrees of Ebullition, always remembring that it is lawful, if much Blood has been taken away, or if the Patient be old, to give stronger Cordials than when bleeding has not preceded, or when the Patient was in the flower of his Age. Those Cordials I call moderate, are made of distilled Water, viz. of Borage, Citron, Strawberries, Treacle, Compound Scordium-water, mingled with the Syrups of Baum of Fernelius, of Gilliflowers, of the Juice of Citron, and the like, but the stronger of Gascoign's Powder, Bezoar, Confection of Hyacinth, Venice-Treacle, and the like. The following are frequently used.

Take of the Waters of Borage, Citron Compound Scordium, Black-Cherries, each two ounces, of Cinamon-water with Barley, one Ounce, of Pearls prepared, two Drams, of Crystalline Sugar a sufficient quantity; mingle them, take four Spoonfulls often in a day, especially in the Fits.

Take of the Waters of the whole Citron, and of Strawberries, each three Ounces, of the Cordial Water of Saxony, one Ounce, of Treacle-water, of the Syrup of Baum of Fernelius of Gilliflowers, and of the Juice of Citron, each half an Ounce; mingle them make a Julip, of which take often,

Take of Gascoign's Powder, of the Oriental and Occidental Bezoar-stone, and of Contrayerva, each one Scruple, one Leaf of Gold; mingle them, and make a very fine Powder; take twelve Grains as oft as there is occasion, in the Syrup of the Juice of Citron and Gilliflowers, each two Drams, drinking upon it a few Spoonfulls of the Julip prescrib'd.

Take of Treacle-water, four Ounces, of the Seeds of Citron, two Drams, beat them together, and make an Emulsion; add to the strained Liquor, a sufficient quantity of pearled Sugar, to make it taste pleasantly, take two Spoonfulls three times a day,

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It is unnecessary to mention more Forms, for they are innumerable, or may be so, and they are to be varied in the course of the Disease, according to the various Seasons and Symptoms.

If the Fermentation be neither too high, nor too low, I leave it in that State, and use no Remedies, unless I am obliged to do something by the importunity of the Sick, or his Friends about him, that may please them without hindering my Design.

And now I must acquaint you, That when I was called to a poor Body, who was not able to be at the charge of going through a long course of Physick, I did nothing after Bleeding and Purging was over, if they were indicated, but order them to keep their Beds all the time of their Sickness, and to drink Oatmeal and Barly Broths, and the like, and that they should drink moderately small Beer warm'd, to quench their Thirst. I also order'd that they should have a Glyster of Milk and Sugar every day, or every other day, till the tenth or eleventh day, and towards the end of the Fever; Separation being now begun, if it were slow, I allowed them now and then stronger Drink to help instead of a Cordial, and so without more ado, except that I used to give a gentle Purge at the end of the Disease, I cured them.

But to return to the Business; If the method before mention'd, be well observed, I usually perceive about the sixteenth day, both from the signs of a laudable Separation in the Urine, and also from a plain Remission of all the Symptoms, that it is fit to give a Purging Potion, to evacuate the Sediment, put off here and there by the foregoing Fermentation; and unless it be done timely there is danger lest it should return into the Mass of Blood, and so cause a Relapse, or may, by its abode in the natural Parts upon which it is thrown, cause hereafter a dreadful Minera of lasting Ills in the Body, viz. Separation being now finished, the gross and impure Humours sent from the Arteries to the Blood, passing back in the Veins, easily hinder its return, whereby various sorts of Obstructions, and at length various Fermentations arise.

But it is to be noted, That Purging is not altogether so necessary after *Spring Fevers*, as after *Fevers in the Fall*, because the Sediment put off by *Autumn* is more, and of a more earthly and malignant quality; and which is also

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to be observed in the *Small-Pox*, and in many other Diseases raging in the *Spring*, wherein it is not so dangerous as in the Cases before mentioned.

And, indeed, he will not be mistaken much who should affirm, That more Diseases arise hence, viz. from the omission of purging after Autumnal Diseases, than from any other Cause whatever.

If the Patient be weak, or if there be not a perfect Despumation, so that we cannot safely give a Purge on the fifteenth day, I defer it to the seventeenth, and then I give the following, or the like, according to the Strength of the Patient.

Take of Tamarinds half an Ounce, of Sene two Drams, of Rhubarb one Dram and half, boyl them in a sufficient quantity of Fountain-water, to three Ounces of the strained Liquor, add of Manna and Syrup of Marsh-mallows, each one Ounce; mingle them and make a Potion to be taken in the Morning.

After Purging, I order the Patient to rise who has been kept in a Bed hitherto by my order, and to return by degrees to his usual Diet, for that which I prescribed to this time, was in a manner the same with that which I have mention'd before, as Oat and Barley Broth, and Pansado made of Bread, and the yolk of an Egg in Water with Sugar, thin Chicken Broth, small Beer, and sometimes when the Fever is high, the Juice of Orange newly expressed, and a little boiled to correct the crudity mixed with it, and the like, tho' Oatmeal-broth is as good as any; but to deny small Beer to be taken now and then moderately, is a needless severity, and very often hurtful.

It frequently happens, especially in old Men, That the Sick, tho' the Fever be cured, and the Body well purged, is notwithstanding, very weak, and sometimes excoriated by Cough, and sometimes hawks up a great quantity of Clammy Phlegm, which does not only tormente the Patient, but also impedes upon the Recovery, if he be not wary, and makes him believe that this will cause a Consumption; tho' I have observed, that nothing is so dangerous, as to let the Sick in this case, or drink of Ale, or of a Nutritive with a Tonic, which strengthening the Course of the Blood, much increases the preceding

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Fever, and consequently unable to assimilate the Juices of the Meat lately eaten) removes that Symptom in the space of a few days, as I have often found.

By this Method which I have propos'd, the Sick will be secured from many ill Symptoms, which are usually attributed to Malignity; for nothing is more frequent with un-experienc'd Physicians, than to blame Malignity, when by cooling Medicines, and the unseasonable use of Glysters, they have so loosen'd the Crasis of the Blood, and so weaken'd Nature in performing the Despumation of it, that Faintings and other Symptoms (which are really the natural effects of such hinderances, occasion'd by Art) happen. But if the Disease, by continuing long, escap'd this Asperion, then whatever afterwards obstructs the Cure is laid upon the *Scurvy*, tho' really, neither the Symptoms which happen'd whilst the Disease was at its height, were the effects of Malignity, nor those which come at its Declination, of the *Scurvy*, but both are occasion'd by ill treatment; as I have frequently observed. Not that I, or any one else, who has been any whit acquainted with the History of Diseases, can be ignorant that there are *Fevers* which do not only consist of an Intemperies or putrid heat, but also of a malignant quality, the plain Symptoms whereof cannot but appear in the Sick; or that I deny that sometimes the *Scurvy* and many other Diseases may be complicated with a *Fever*; only I say, That these Diseases are often undeservedly censured,

If the Fermentation go on well, there will be a perfect Despumation of the Morbifick Matter within the time before mention'd; But if Glysters or cooling Remedies have been used too late, the *Fever* will continue much longer especially in very old Men, ill treated by the Physician. I have been sometimes called to such after they have had a *Fever* forty days, or more, and have try'd all things to promote the Despumation of the Blood; but it was so much weaken'd, partly by old Age, and partly by Glysters, and cooling Medicines, that I could not obtain my End either by Cordials, or any other strengthening Medicine, but either the *Fever* continued, or if it seem'd to cease, the Patient's strength was very low, or in a manner gone.

But other Remedies being used without success, I have been often forced to take this course, and really with good success, viz. I have apply'd the vigorous heat of young People

People to the Patient; nor is there any reason why any one should much admire that the Sick is so much strengthen'd, and feeble Nature reliev'd thereby, (tho' it be unusual) as that it can free it self from the Relicks of the matter to be ejected, seeing it is easie to conceive a transfusion of great quantities of vigorous *Effluvia* from the sound and strong Body to the weak one of the Sick. Nor have I ever perceiv'd that the repeated applications of hot Cloaths could do what this has done; for the heat apply'd is more agreeable to the humane Body, gentle, moist, equal and lasting; and though this way of transmitting *Balsamick Spirits* into the Body of the Patient might seem ridiculous at the time when I order'd it, yet it hath since been us'd by others with good success. Nor, indeed, am I ashamed to mention this Remedy, tho' perhaps some impertinent Men superciliously contemning all things vulgar, may ridicule me for it; for I reckon the Health and good of my Neighbour is much to be prefer'd before their vain Opinions.

He that with due consideration has follow'd the Method deliver'd, will secure his Patient, if not from all, yet at least from most of those Symptoms, which are either wont to accompany the Fever or to follow it, and which makes the Physician doubtful, and at a loss in the course of the Cure, and often kills the Patient, tho' the Nature of the Disease does not seem deadly. But because such Accidents frequently happen, either by reason the Sick neglected to call the Physician in time, or upon the account of the negligence and unskilfulness of the Physician, I judge it proper to treat briefly of their peculiar Cure, but will only confine my self to those Symptoms which require a different Cure proper to themselves, when they happen, tho' they might often have been prevented, if the Sick had follow'd the aforesaid Method.

If the Sick, either upon the account of taking hot Medicines unseasonably, or by being naturally of too hot a Constitution, fall into a *Phrensis*, or which is next to it, if he cannot sleep, often calls out, or uses incoherent words, if he looks and talks fierce, if he takes Medicines and common Drink greedily, and as it were snatches it; and lastly, has a suppression of Urine: In this case, I say, I bleed more freely than before, and use Glysters and cooling Medicines oftner, especially in the Springs. And tho'

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tho' this Symptom does not appear in young People, and in those whose Blood is vigorous, they admit of these Remedies without much danger, and by the use of such Remedies I endeavour to keep up the Patient till the Disease has lasted a while, and then it is not hard to remove the Symptom and the Disease too. And this may be done by ordering some Narcotick Medicines in a large Dose; for tho' when the Fever is at the height, those things that are of a Narcotick quality do no good, nor answer the Physicians intention, yet being given seasonably in the declination of the Disease, they are very useful; but before they can do no good, partly because they cannot stop the course of Fermentation, tho' they are taken in the largest Dose, and partly, which is most considerable, because the peccant matter at that time equally mixed with the Blood, and not yet tending to Separation, is restrained by such a Medicine, and so the Disposition so much to be desired is obstructed. But whether this be the reason of his *Delirium* or some other more obstruce, let those judges who are from and have leisure to think on such things. But I affirm, That it is most certain, from a faithful and true Collection of many Observations, that *Antimony* or any other Narcotick, in the beginning, increase, or State of this Fever, does no good for vanquishing this Symptom, but is often injurious; but in the declination of the Disease it is used successfully in a moderate Dose. I once order'd a Narcotick on the twelfth day of the Disease to good purpose; but I never knew it used sooner with any success; and if it be defer'd to the fourteenth day, it will succeed better. Separation then being more perfect. Now, indeed, does this dreadful Symptom, tho' it often much terrifies the By-standers, presently kill; for I have frequently taken notice, that it could, and was wont to beat a Trade off it was fit to give Narcoticks, if care was taken that the Intemperies begun was not heighten'd to much by Cordials and hot Medicines; for if for the Patient dies suddenly. The Narcoticks which I frequently give, are either *London Laudanum*, from one Grain to one Grain and a half; or the following

Take of Consilid-flovers one handful, beat them in a sufficient quantity of Blackberry-water, dissolve half an Ounce of Black-salt, and half a Spoonful of the juice of

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of Lemons, in three Ounces of the Strained Liqueur; mingle them: Or,

Take of Blackberry-water one Ounce and a half, Epidemick-water two Drams, Liquid Laudanum fifteen Drops, Syrup of Gilliflowers one Dram; mingle them.

I will only add this one thing, which I think fit to be noted. That if this Symptom will grant a Truce so long, it is best to purge the Patient before the taking of the Anodyne; for then it will prove more effectual; wherefore I frequently gave two Scruples of the Pill. Cath. maj. dissolved in Beery-water ten or twelve hours before the taking of the Narcotick. Nor is there any danger from the tumult which that hot Pill should otherwise cause, for the Virtue of the following Narcotick will quell those Commotions, and establish most gentle and sweet Peace.

But if the Watchings remain after the Fever, and other Symptoms are gone off, I have observed, That a Rag d'yd in Rose-water, and apply'd cold to the Forehead and Temples, does more good than any Narcotick whatever.

It frequently happens, that the Sick is vex'd with a Cough, through the whole course of the Disease, the Mass of Blood being in a Commotion, and raging violently, all things now tending to Sedition, it comes to pass, that the Humours let loose, and flowing from the Mass of Blood by the Vessels of the Lungs, are also by an Apertion of them, cast upon the inner Membrane of the Wind-pipe; to wit, the thinner being of exquisite Sense, and hence the Cough arises, which is first dry, because the Matter being yet thin, frustrates the expulsive Faculty, and finally it grows thick, and is difficultly expectorated, because by degrees it is baked by the Fever, so that the Patient is discourag'd by the fear of choking, because he wants Strength to cough up the clammy Matter. In this case I seldom use any thing but Oil of Sweet Almonds fresh drawn, unless the Sick has wholly an aversion to Oyl; and sometimes it is so, and then we must use the common Pedoral; but I reckon Oil of Almonds, if the Patient can take it, is to be preferred before other Pedorals, for this reason chiefly; for that it is necessary they are given in a larger quantity; if we do any thing to the purpose; and by this means we overcharge the Stomach, which was too weak before and disposed

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disposed to be Nauseous; and sometimes also we are hinder'd upon the same account, so that we cannot attend on those things which are to be dispatched at the same time, neither can I understand nor learn by Experience why we should abstain from the use of this Oyl (which we have now mention'd) in *Fevers*, to wit, because its inflammable, and therefore to be feared, lest it should increase the *Fever*; for, suppose it is naturally hot, yet certainly its heat is not so great, but that the advantage of it upon another account may compensate for it; for it is plainly more pectoral than other things, and opens and smoothenes the Passages, and helps Expectoration, whereby, especially if it happens to be large, the Blood is freed from a troublesome Humour, and also somewhat cooled; and therefore I am not much concern'd when at any time I perceive this Symptom intervenes, for by it the Patient is much relieved; only it is to be noted, That it is not good to give it at first by whole Spoonfuls, lest it make the Stomach nauseous, and occasion a Looseness, therefore it must be given sparingly, and frequently night and day, whereby expectoration being made, the *Cough* is not only lessen'd, but also, which is of some moment, the Patient's Strength worn out, is somewhat renew'd with a gentle Nourishment.

Sometimes it happens, that Bleeding at the Nose supervenes, either because too hot Medicines were used at the beginning of the *Disease*, or that the Ebullition was not sufficiently restrained when the Patient was in the flower of his Age, or the Season of the Year furthered it. If it so happens, these things will do little good to stop it, *viz.* Bleeding, Ligatures, astringent and agglutinative Medicines, or those things that qualifie the Acrimony of the Blood, or the like; for tho' these things and the like may be used according to the discretion of the Physician, yet the main business is to bridle the Ebullition of the Blood, with some fit Medicines that may stop the Force of it rushing upon every Precipice. Indeed, if the Symptom be consider'd apart, these things we have mention'd before, especially Bleeding are proper enough, neither would I doubt to use them, but truly they do not sufficiently answer the cause of this Symptom, at least if you except Bleeding. And really it is as rational to endeavour with a Sword to put out a Fire, as to take off the Symptom by

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the things abovemention'd: Therefore having try'd in vain other things in this case, I used to prescribe some such thing as follows.

Take of Purslain and Erratick Poppy-water each one Ounce and an half, of Diacodium six Drams, of Syrup of Cowslips half an Ounce; mingle them for a Draught.

I would not be so understood, as if I would presently stop every Hemorrhage, for the Patient may be much reliev'd thereby, partly by suppressing too great an Ebullition, and sometimes by carrying off the Disease critically. And truly it is to little purpose to use the aforesaid Remedy for this Symptom before it has continued some time, or before a Vein has been open'd in the Arm: But it is to be noted, that this and all other immoderate Hemorrhages have this peculiar to them, that as soon as they are stop'd, by what means soever it be, the Patient is in danger of a Relapse, if some gentle Purge be not given, and therefore we must purge, tho' with respect to the Fever it is wont and ought to be put off for a longer time, unless this Symptom happens.

The *Hiccups* most commonly happen to old Men after large evacuations by a Looseness, but especially by Vomiting; they are very often the forerunners of Death. I confess I cannot satisfy my self as to the cause of the *Hiccups*, yet I have taken notice, that they arise from a disturbance in the Stomach, and the Neighbouring parts raised by rough Medicines, for the quelling and reducing whereof to its former Peace when the Strength of Nature is not sufficient, there is great danger; and therefore I thought it necessary to provide for it, that what Nature could not do her self, she should do by the assistance of Art; and two Drams of *Diacodium* has done the business when I could do no good with the Seeds of *Dill*, and other things that are counted Specificks.

If a Looseness happens in the course of this Disease, which, as we have said, used to come when a Vomit was indicated at the beginning of this Disease, and yet was not given, in this Case, I say, a Vomit may be used at any time of the Disease, if the Patient be not too weak, tho' the inclination to vomiting be long since past: But because I suppose I have spoken enough of this before, I will only mention

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mention what is to be done if a Looseness come, tho' a Vomit has been given, which truly is very rare, unless in an *Inflammatory Fever*, where a Vomit occasions it, which must be observed; therefore in this case the following Glyster is more beneficial than any other Astringent whatever.

Take of the Bark of Pomegranats half an Ounce, of Red Roses two pugils, boil them in a sufficient quantity of Cow Milk, dissolve half an Ounce of Diacordum in half a Pint of the strained Liquor; mingle them, and make a Glyster.

It is not convenient that the quantity of the Glyster should be greater, for tho' it may be naturally astringent, yet there is danger, least it should weary the Guts by its bulk, and so provoke the Flux, which we endeavour to stop.

But here some may object, that it seems more proper especially at the declination of the *Disease*, that the Looseness if it happens, should rather be let alone than stop'd because it is sometimes critical, and carries off the *Disease*. I answer, that sometimes indeed the *Fever* is carried off this way, but this so seldom happens, that we may not depend upon it: And that account (wherein having spoken generally of the Cure of all *Fevers*, we endeavour'd to prove the necessity of stopping this Flux) is also here much to the purpose; and now this is to be added, and I think it is worth noting, viz. that for a genuine depuration of the Blood, it is not only necessary that there be a separation of humours by the pores, but it is requisite also, that others like Vessels be separated, which is daily seen in other rich and heterogeneous Liquors; therefore if we too much indulge the Looseness, the depuration so much desired, would be only imperfect, and perchance that which should be cast out last would be secreted first. Indeed I confess that separation by Pores being made, (which by the way is performed gradually and insensibly, and more frequently by large perspiration than by manifest Sweat) the Looseness if it should chance to happen, would not be very dangerous: And it is to be noted, that this only happens, because purging to carry off the Fe-

ces was not seasonably order'd, which by their continuance growing Malignant, provoke the Intestines to Excretion, to say nothing of the liquid consistence of the Excrements (for so they are most commonly) which sufficiently indicates, that it is not to be counted a critical solution of the Disease.

I suppose the *Iliack Passion* may be reckon'd among the Symptoms of Fevers, because violent Vomiting, which are wont to appear at the beginning of Fevers, sometimes occasion it.

This dreadful Disease, which has been hitherto accounted mortal by almost all, arises from the inverted and preposterous motion of the Guts, the Fibres of them, which ought to be contracted from the superior towards the inferior, are drawn to the superior; so that whatever is contained in the Guts is vomited up; and Glysters, how sharp soever, become vomitive: Purges also by the Mouth are cast up by Vomit; and I suppose the exquisite and intolerable Pain coming upon this Disease is only occasion'd by the fore-said preposterous motion of the Guts; for whereas those Folds which the many circumvolutions of the Guts make are so formed by Nature, that they should most fitly conduce to the carrying down of the Feces; when they, I say, are forced to give way to a motion contrary to their Fibres, the afore-said pain is occasion'd from thence, which is fixed to one Part; and this is like the boring of an Auger, when either the Valve, which is placed at the beginning of the Colon, hinders the going back of the Excrements to the *Ilium*, or any other Membrane belonging to the *Sinus*, sustains alone the force of this preposterous Impulse.

We may assign a twofold cause of this Inversion from whence the pain arises, *viz.* Obstruction and Irritation.

First, therefore, whatever violently obstructs the intestines, so that nothing can pass downwards, necessarily occasions this contrary motion in them; among these Authors are wont to reckon the Excrements hardened, gross Wind collected in a great quantity, and tying upon as it were the Guts, the constriction of them is a Rupture; and lastly, an *Inflammation*, and other great Tumors, which stop up the internal cavity of the Guts. In the mean time we must not deny that this contrary motion arising from these causes is rather to be accounted the motion of the things tak-

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ken in, than of the Intestines: Nor is this an Inversion of the whole duct of the Intestines, but only of those which are situated above the Seat of that Obstruction; wherefore I call an *Black Passion* proceeding from hence *spurious*. Secondly, I suppose, that in the *Black Passion* the cause of the inversion of the peristaltick motion of the Intestines is most commonly after this manner; viz, sharp and malignant Humors are cast upon the Stomach and Guts that are next to it, by the Blood raging by reason of the Fever begun of late, whereby the motion of the stomach is first inverted, and forced violently to cast up What is contained in it; at length the Small Guts that are joyned to the Stomach being weakened, yield to the violent motion of it, and with them at last the greater follow by consent, the Stomach vomiting, leading as it were the Dance; this I call the true *Black Passion*, and which is treated of now; the Method of curing it has been hitherto in a manner unknown, whatever some boast of the use of *Quicksilver* and *Bullets*, which are very often injurious, and seldom do much good. I have used successfully the following Method.

When it appears by Glysters vomited up, and other signs, that it is a true *Black Passion*, I endeavour three things; first, that the contrary motion of the Stomach, which occasions the same motion of the Guts, may be hindered: Secondly, that the Intestines, being weakened by the sharp Humor, may be strengthened, Thirdly, that the Stomach and Guts be free from those Humors. And that I may answer these Indications, I order the Cure after the following manner. First, I prescribe one scruple of Salt of *Wormwood* in a Spoonfull of *Juice of Lemons*, to be taken Morning and Evening; but at other times of the Day I order some Spoonfulls of *Mint-Water*, without Sugar or any thing else, to be taken twice in an Hour, by the repeated use whereof alone the vomiting and the pain proceeding thence will soon vanish. At the same time I order a live Kiting to lie always upon the naked Belly; but after the pain and vomiting has wholly ceased for the space of two or three Days, I give one dram of the *Pill-Cosmias*, dissolved in *Mint-Water*, which I also order to be used very often all the time of the working of the Pills, that I may the more certainly hinder the return of the vom-

ting : Nor is the Kitling to be removed before the Patient has taken the Pills.

I have taken notice, that It is to no purpose to give these Pills, or any other Purge how strong soever, until the Stomach is corroborated and reduced to its natural motion, and the Guts to theirs, for otherwise all Purges taken inwardly will prove a Vomit, and so do more hurt than good ; and therefore I do not use purging Medicines, until for some time I have used those Medicines which respect the Stomach.

I prescribe a very thin Diet, for I allow only some spoonfuls of Chicken-broth to be taken twice or thrice a Day ; in the mean while I order the Patient to keep his Bed all the time of the Sicknes, till the signs of perfect Health appear ; and when he is well, I appoint him to persist in the use of the forefaid Water, for a long time, and to keep his Belly warm with Flannels doubl'd, that there may not be a Relapse, to which this *Deseases* is more obnoxious than any other.

My whole Method of curing this *Deseases* consists of these few things, which I trust will not be despised by any judicious Person, by reason of its simplicity and want of Rhetorick, and pomp of Medicines. And these are the Symptoms that are wont to happen in this *Fever* : There are some others which I will not now mention, partly because they are of less Moment, and partly because they do not require a peculiar way of cure, for the *Fever* being well treated, they go off of themselves. And so much for the *Continual Fever* of this Constitution, and of its Symptoms.

CHAP. III.

*Of the AGUES of the Year
1661, 62, 63, 64.*

FOrasmuch as we said before, the Constitution of all the forementioned Years did so much favour the producing *Agues*, I will here impart those Observations that

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I then carefully collected: I will add moreover those things, which I observed of some few Intermittents, which from that time happened sporadically, that I may not interrupt the History of the following Years.

And first, that we may at least make some conjecture about the Nature and Genius of *Agues*, it is to be served, so that these three Seasons are to be considered in the Fits; first, the time of shaking; secondly, of ebullition; thirdly, of despumation. To speak briefly of these things, I suppose it proceeds hence, *viz*, because the febrile matter, not as yet urgent, was in some sort assimilated by the mass of blood; and being at length not only useless, but become an Enemy to Nature, does in a manner exagitate and provoke it; whence it comes to pass, that being stirred up by a certain natural sense, and as it were endeavouring to escape, it causes a shivering and shaking in the Body, a true witness of its aversion, just as purging Potions taken by squeamish Persons, or poisons casually taken, use presently to cause a shivering, and other Symptoms of that kind. Nature therefore being irritated in this manner (that I may now come to the time of ebullition, that she may the more easily keep this Enemy from her Throat, falls upon fermentation, the usual Engine which it is accustomed to make use of in *Fevers*, and some other acute *Diseases*, when it endeavours to free the Blood from intestine Enemies; for the disjoined parts of the peccant matter, which were equally mixed with the Blood, do by the help of this Effervescence begin in some sort to be gathered together, and so may the more easily be wrought upon, so as to be made fit for despumation: And it seems very probable that it may be so, for they which die of *Agues*, if they die in the Fit, go off at first with a shaking; or if they reach the hot fit, they escape, at least for that time, and the Patient is worst at the time of shaking, which being past, despumation follows, and then all the Symptoms abate, and at length quite cease. By the word *Despumation* I mean nothing else than the expulsion or separation of the febrile matter, now brought under, and as it were conquered; and what is separated is of the Nature of *Yeast* and *Loos*; as we may observe in other Liquors.

These things being premised, let us consider how it happens that the Fit returns, seeing the Patient at present

sent seems to be well. Indeed the febrile matter is not yet wholly gone, but as young Bees grow up lieſurely at ſet times. ſo this latent matter, according to the Nature of the Fits, appears again, and cauſes new trouble, running the ſame courſe as before. But if any one ſhould aſk the reaſon why the hidden Fomes being not thoroughly ſubdued by the preceding efferveſcence, and therefore not expelled with the reſt of the peccant matter, and ſo about to cauſe new Troubles, ſhould not proceed alike in all Agues, ſometimes it requires one Day, ſometimes three, before it comes to maturity and makes a new Fit. I ſay, if any one ſhould enquire about this matter, I would plainly confeſs, I knew not, nor has any other that I know ſufficiently explicated this hidden work of Nature. I do not covet the Name of a Philoſopher; and I admoniſh thoſe that reckon they have merited that Title, and perhaps blame me, becauſe I have not endeavoured to dive into theſe Secrets of Nature, to try their Faculties in other works of Nature, which are every where to be ſeen, before they cenſure others; for I would ſain know why a Horſe comes to his growth in ſeven years, and a Man at twenty one; why ſome Plants flower in May, and ſome in June, to ſay nothing of other things. And if the moſt Learned Men are not aſhamed to confeſs openly their Ignorance of theſe things, I cannot ſee why I ſhould be blamed, if I forbear reaſoning about a thing as difficult to the full, and perhaps wholly inexplicable; and yet I am perſwaded, that the progreſs of Nature is a certain and regular in this caſe as in any other, and that the matter of a *quartan* and *tertian* Ague is ſubject to Nature's Laws, and govern'd by them, as well as any other Bodies whatever.

All Agues begin with ſhivering and ſhaking, and are preſently ſucceeded by heat, and then ſweat; The ſick moſt commonly vomits both in the cold and hot Fit. Is very ſick, dry, and thirſty, and his Tongue is very dry, and the like, all which Symptoms retreat by degrees, as the ſweat comes on; and when it is very plentiful, the Fit ſeems to be at an end, and he that was juſt now ſick ſeems to be very well, till the Fit returns at its wonted time, viz. a *Quartan* once every natural Day, a *tertian* every other day, a *quartan* every third day, reckoning from the beginning of one Fit to the beginning of the next, ſho' of-

ten the two last are doubled; so that a *tertian* invades daily, the *quartan* two whole days, the third being free from a Fit; and sometimes also it comes for three days together, when it is a tripple *quartan*, the *Ague* taking its name from the shape it first assumed, which doubling of the Fits sometimes proceeds from the excess and too great activity of the febrile matter, in which case the adventitious Fit comes before the first, sometimes also from the loss of strength, the Patient being much weaken'd, and the vigour of the Fit broken, either by cooling too much, or by evacuation above measure. In this case the adventitious Fit follows the first, and does not last so long: In the former instance the turgescency or fury of the matter does not wait for the return of the period due to it, and performs its despumation somewhat sooner: In the latter the Blood being not vigorous enough to put off the febrile matter at once, presently substitutes another afresh, whereby it may expel the Relicks of it: And perhaps from these two opposite causes depend as well the anticipation of the Fits, as the slow access of them in an ordinary and regular *Ague*, both whereof frequently happen in these Fevers, which, as has been said, continue a Night and a Day, either coming before the usual time of the Fit, or after it.

Of Agues.

Some belong to the *Spring*, and some to the *Fall*; for tho' some come betwixt these two Seasons, yet because they are not so frequent, they may be reduced to either of the two former, viz. to that which is nearest: Therefore I shall comprehend them under these two kinds; the Seasons whereunto they are for the most part to be referred particularly, are the Months of *January* and *August*, tho' sometimes they come sooner, according to the greater or lesser disposition of the Air to produce them, and consequently they are more or less Epidemical, of which we have a clear Instance in the *Agues* of the Year 1661, at which time I remember a Woman, my Neighbour, had the First Fit of a *Quartan* on *St. John's Day*, and many others were seized very early with *Agues* about that time, which were afterwards very epidemical; and this shews, that there was then a great Disposition of the Air to those Diseases; and more,

moreover, as the Year increased they grew more numerous.

And this distinction of Agues is so necessary, that unless we observe it well, we can neither make our *Prognostick* aright, how long they will last, nor keep our Patient's Body to a due Regimen, with respect to the different Nature both of *Seasons* and *Agues*. I confess, the Agues of each *Season* are naturally not altogether unlike, whether you consider the manner of their coming, which first begins with shivering, then Heat follows, and at length Sweat; or the difference of their Types, in respect whereof some are *Tertians* both *Spring* and *Fall*; yet I do not question but they are very different in their Nature or Essence. And to speak first of *Vernal Agues*: They are almost all either *Quotidians* or *Tertians*, and they come either sooner or later, according to the various Disposition of the Season; for in the Winter-time the Spirits are concentrated, and in their Recess gather Strength, which being now brisk, the Heat of the approaching *Sum* draws out, and being mix'd with the viscid Humours, (yet they are not so viscid as those the Heat of the foregoing *Fall* has torrefy'd) which Nature during Winter had heaped up in the mass of Blood, while they endeavour to fly away, are as it were entangled, and so cause the *Vernal Effulsion*, as Vessels full of Beer kept long in a cold Cellar, if they are set near the Fire, presently begin to work, and the Liquor is apt to fly. The Blood being in this manner affected, endeavours the purging it self, and by the help of Volatile Spirits, does the Business soon enough, unless it chance to be too full of viscid Juices, which obstruct the Fermentation begun; and tho' this happens, yet the *Vernal Effervescence* is seldom continual and constant, but is usually divided into several Fits; for the Blood being now turgid with rich Spirits, Nature falls to her Work in haste, and makes Secretion of some parts by particular Fits, in the manner of perfect Solution, before she performs universal Separation: And this is probably the Reason why in *Spring* time (especially that part of it which is nearest *Summer*) we meet with few *Continual Fevers*, unless the Constitution chance to be Epidemick, for the fermentations that then rise are either quickly laid, or hasten to an Intermission; or lastly, part of the Humours being more inclin'd to separation, are hastily and with some violence

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translated to another place, whereby *Quinsies*, *Peripneumonies*, *Pleurisies*, and the like, presently arise, shewing their Heads, especially at the latter end of the *Spring*.

I have observ'd, that *Spring-Agues* are seldom lasting, and always beneficial, so that the oldest Man, or any weak person, can scarce be destroy'd even by the over-officiousness and destructive nicety of the most ignorant, yet I have seen *Spring tertians* protracted to the time wherein *Autumnal Agues* used to come, by bleeding and Purging unseasonably used, together with a regimen disagreeable to the *Disease*; but that Season being very contrary to the nature of it, presently extinguish'd it, but the Patient is the mean while almost ruin'd by the frequent doubling of the Fits, and the long continuance of them; so that he seems to be in much danger, yet so far as I have observ'd he has always recover'd: nor could I perceive those ill Symptoms in such as recover of this *Disease*, as follow long *Autumnal Agues*, as shall be said by and by, I mean a deadly Inflammation of the Almonds of the Ears, and hard Bessy, a *Dropsie*, and the like. But I have more than once observed, that when the sick has been extremely weaken'd by the length of the *Disease*, and doublings of the Fits, together with mischievous evacuations repeated, he has been seized with a *Mania* when he first begun to recover, but it went off by degrees as Strength returned.

But *Autumnal Agues* are much different: for, first, a *Tertian*, tho' sometimes it goes off soon, and is not accompanied with more Symptoms than *Vernal Tertians* are wont to be when it is not epidemical, and seizes sound People; yet when it is Epidemical, and falls on those that are in Years, and of an ill habit of Body, it is dangerous, and lasts two or three Months, and sometimes till the beginning of next *Spring*. But *Quartans* are more dangerous and obstinate than those we treated last of; for when they seize old People they sometimes kill them; after they have had a few Fits, and when it was so, they dye most commonly in the cold Fit, as was said before, but if the Patient be not very ancient, there is not such danger of his being dispatched at first, yet he will scarce recover till the next Year, and that time approaches wherein he was first seized; and sometimes also they leave behind them something that kills the Patient. A *quartan* sometimes varies the Type and also occasions many Symptoms;

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for example; the *Scurvy* an *hard Belly*, a *Dropsie*, and the like: But young people are able to bear this *Disease*; yet most commonly it continues till *March*, and sometimes till the next *Fall*, when they have been blooded and purged. I have seen Infants hold out to admiration for six Months, and they have also recovered.

It is here to be observed, that of what age and temperament soever he be that is seized with a *quartan*, it will not last long upon him, if ever he had it before, tho' it were long ago, but after a few Fits will go off it self. And this is worth taking notice of.

As to the cure of *Spring Agues*, I ever thought they were to be left to themselves, without doing any thing because I never knew any one destroyed by them; and on the contrary, that those that endeavour'd to cure them, made them only more obstinate and lasting: But if the Sick earnestly desire a *Physician's* Help, they may be successfully treated by various Methods, as I have frequently observed.

A Vomit given so as that it might have done working before the Fit, has succeeded well, especially if a moderate Dose of *Diacodium*, or any other Anodyne, has been given after it has done working, just before the Fit comes.

Sometimes *Diaphoretics* perform the Cure by promoting the Sweat coming at the end of the Fit, the Patient being well covered with Clothes, which must be continued as long as he can bear it, and this does the business often in *Spring Agues*, especially in *Quotidians*, for the humour being not very thick at this time, the Disease is carried quite off, which otherwise would return again: But this never happens in *Autumn*. I have sometimes cur'd *Tertian Agues* by Glysters given three or four Days of the well Days.

But if by Bleeding, (to which the Season of the Year soon inclines the unwary) or by reason of the foregoing weakness of the Patient, the Spirits that should presently endeavour despatchment are so much weakened that they cannot well perform it, it may happen that these *Spring Agues* may continue as long as *Autumnals*, notwithstanding all that can be done, tho' they are not wont to last so long; for either they go off of their own accord, or are soon cured by gentle Remedies. But *Agues* in the *Fall* are not so soon

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soon removed; and therefore I shall say something of these. If the Autumnal Constitution be epidemick, they are wont to come about June; if not, they do not invade till August, or the beginning of September; but they seldom happen in the Months next following.

You may observe, that a great many of them come together; they come most commonly in the same Day, and at the same hour of the Day, the Fits coming sometimes sooner, sometimes later, in the same way and manner, unless it happen that the Order be perverted or changed by Remedies that have a faculty of hastening or retarding them in some Bodies.

It is to be observ'd, that it is a hard matter at the beginning of Agues, (especially of those that are Epidemical in the Autumn) to distinguish them at the first invasion, for they are at first accompanied with a Continual Fever. Nor is it easie for some time afterwards, unless you take great notice, to perceive anything more than a remission, but by degrees they perfectly intermit, and exactly agree with the Season of the Year.

They are either *tertians* or *quartans*, and it may be well said of *quartans*, that they are the genuine product of the Fall. These Agues are so allied to one another, that they frequently change from one to the other. But *Spring-Tertians* never assume the shape of *quartans*, for they differ as much as can be possibly imagined. Moreover, I never observed a *quotidian* in this Season, unless any one well have a double *tertian*, or a triple *quartan*, so called.

These Agues, I suppose, arise most commonly in the manner we shall now briefly mention; according to the progress of the Year the Blood is proportionably exalted (as Vegetables by their growth and decay shew the course of the Year) till it comes to its height, and then again keeping pace with the declining Season of the Year, it declines also; and more especially when push'd down by some accidental cause, as by immoderate loss of Blood, by taking cold, by crude and excrementitious Meats, by the unseasonable use of Baths, and the like. And when the Blood is in this ebbing state, it soon receives every morbid impression that any constitution of the Air will make upon it, which is Epidemical at this time for Agues; and the Ebullition presently begun tends hither, which seiz-

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ing the Blood sometimes very degenerate, the Fever arising from thence, is wont to be untoward, and full of malignant and dreadful Symptoms. But, however it happens, the Blood having lost a great part of its Spirits, and being much corrupted by the foregoing Summer, performs the Ebullition slowly, and requires a very long period for its despumation.

Now, that it may plainly appear how difficult it is to cure these Agues, I mean *Autumnal*, we must consider, that the difference betwixt them and the *Continual Fever* in this Season, consists especially in this, viz. *Continual Fevers* constantly carry on the Effervescence in one and the same order, when it is once begun; and Agues perform the same at several times; but Fermentation is finished in both by Nature's guidance, in 336 hours, or thereabouts, for the mass of Blood in an human Body is not commonly purged sooner or later than so, if the business be left to Nature; as *Sider*, *Wine*, and *Beer* have each of them their peculiar period, wherein they are depurated: And tho' in Agues the Blood sometimes, as it happens in a *quartan*, endeavours its despumation in the space of six Months, and at length finishes it, yet if you calculate right, there is not more time spent in performing it, than what naturally is wont to be spent in *Continual Fevers*; for fourteen times twenty four hours, or fourteen natural Days, mak 336 hours, and allowing five hours and a half for every Fit of a *quartan*, you will have in a *quartan* the value of fourteen Days, that is 336 hours. Now if any one should say, that a *quartan*, for instance, and the like, is to be understood of other Agues, sometimes runs beyond the space of six Months, before it finishes its period; I answer, That the same is frequently seen in *Continual Fevers* of this constitution, which are many times protracted beyond fourteen Days. But in either case, if you have a care that the Effervescence (especially towards the end of Fevers) proceeds well, and in good order, and be kept up brisk, despumation will be finished within the space of time aforesaid, that is, in 14 Days, or 336 hours; but if at that time, that is towards the declination of the Fever, you unseasonably obstruct the Effervescence, either by Medicines that cool the fermentation, or by Glysters, that give a check to it,

no wonder if they last long, because the Order of Nature is disturbed, for by this means the tone of the Blood is in a manner loosen'd, so that it cannot betake it self effectually to perform despumation; yea, sometimes in weak Bodies the same happens of its own accord, unless you assist weak Nature by the help of Gordials, that it may be enabl'd to perform despumation.

But here it must be observ'd, that those things which we have mention'd above concerning the space and duration of the fermentation, are only to be understood of those *Fevers* that have arriv'd to a settled State and Habit, for there are some *Fevers*, both continual and intermittent, which are of a transient and uncertain Nature, and do not reach the destin'd periods in their Effervescencies. Of this kind are those that sometimes take their rise from some small Error in the six Non-naturals as they are call'd, as from a disorder in eating and drinking, or of the Air, and the like. They who are seiz'd with these Diseases often recover soon; and the same happens in young Men, whose Blood is pure, and stock'd with many Spirits, for their *Fevers* depending upon a spiritual and thin Matter, that easily flies away, soon perform their fermentation, and having swiftly run their race, disappear; for this is principally necessary to fermentation, viz. that the matter to be fermented, whether Blood, Wine, or any other kind of Liquor, should be so clammy and tenacious, as to retain the entangled Spirits in such a manner, as that they may be stirred and moved in the Liquor, as Birds, caught in Birdlime, and Flies in Honey, may struggle and buzz, but cannot flie away. But by the by, the foremention'd Liquors ought not to be so clammy, as to overwhelm and quite oppress the Spirits, so that they cannot move at all.

These things being laid down (which in my opinion are reasonable enough, however they may seem to others) it will not be strange, if I propose no other method of Cure than what seems useful to perfect the despumation in *Continual Fevers*, for that they do no way differ from them, if you consider the method whereby Nature is wont to expel the matter of them, viz. by Effervescence contained in a certain Period; tho' I must own they differ from *Continual Fevers*, and very much among themselves with respect to the kind of them, and propriety of their nature. We must therefore take an Indication, either by observing

observing carefully the method that Nature uses to free her self from this Disease, and so quicken fermentation when begun, and by that means cure our Patient; or by enquiring into the specifick Cause, we must endeavour to conquer the Disease by effectual and specifick Remedies, Indications must be taken from one of these two. I have gone both ways to work, with great care and intention of Mind, but have not been able to remove *Agues* in the *Fall*, before they had finish'd their stated fermentations we have mention'd before, how troublesome soever this may seem to those that have *Agues*, who are so long and unwillingly compell'd to wait for Health. But if there be any Man, who knows how to stop the career of these *Agues*, either by a Method or a Specifick, he is certainly oblig'd to discover a thing so beneficial to Mankind; but if he refuse to do it, he is neither a good Citizen nor a prudent Man; for it does not become a good Citizen to reserve that for himself which may be advantageous to Mankind; neither is it the part of a prudent Man to deprive himself of that Blessing he may reasonably expect from Heaven, if he makes it his business to promote the Good of the Publick; and truly, Virtue and Wisdom are more valued by good Men, than either Riches or Honour.

But tho' it is hard to cure *Agues* in the *Fall*, yet I will mention what I have found most successful in the management of them.

I have found by the frequent Experience, that it is very dangerous to attempt the cure of *Agues* in the *Fall* by Purging, unless we proceed in the way to be mention'd by and by) but especially by Bleeding; for in *Tertians* (especially if the Constitution be very Epidemick) if Bleeding does not presently remove the Disease, it is prolonged thereby, even in young People, and in such as are of a strong Constitution; but in old People, after they have been a long while afflicted with the *Ague*, Death follows, and the deadly Inflammation of the Almonds is commonly the Fore-runner of it. Moreover, Bleeding hastens those other Symptoms, which we said accompanied *Autumnal Agues* at their latter end, or follow'd presently after them; but Bleeding is so very prejudicial in *Quartans*, that by reason of it they continue a whole Year upon young People, whereas otherwise they would go off in half the time. And whereas ancient People may be freed from them with-

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in a Year if they do not bleed, there is danger if they do of their continuance beyond the appointed time, and of their dying of them. What has been said of Bleeding may easily suit with Purging, only it is not so very pre-dicial, unless it be often repeated.

I begin with *tertian Agues* in the *Fall*, in the following manner; the Patient being put to Bed and well covered, I sweat him with *Sage Posset drink*, about four hours before the Fit comes, and as soon as he begins to sweat, I give him two scruples of *Pill. Coch. maj.* dissolv'd in an ounce of the following mixture.

Take of Aqua vitæ one point, of Venice Treacle three ounces, of English Saffron one dram; mingle them, keep them for use.

When he has taken these things, let the sweat be continued for some hours after the time wherein the Fit should come, taking great care of those interruptions of sweating, which perhaps Stools may occasion, by reason of the *Purge*. I had better success by the use of this Medicine in the cure of *tertians*, than by the common Decoction of the Roots of *Gemian*, and the tops of *Centaury* with a little *Sena* and *Agarick*, which aims at the same things; for seeing it provokes at the same time those two contrary motions of sweating and going to stool, it has the same effect as the other by confounding and interrupting the ordinary course of the Fit, and indeed is more effectual, and full as safe. I have cured a great many *tertian Agues* in the *Fall* by this method; neither could I in these years find a better.

In a double *tertian*, which has varied its type, by reason the sick was weakened by Evacuations, or any other way, the sweat must be raised as before, and at the same distance of time from the next Fit, either by the Medicine before mentioned (but the *Pill Coch.* must be omitted, for it is neither safe, nor to any purpose, to weaken the sick more by purging when he has been weaken'd by it already, and so by it to further the doublings of the Fits) or by some other strong sweat, which may be also repeated in the genuine Fit next following. When the Patient is extremely weakened by the doubling of the Fits, I order the following Elixuary.

Take

Take of the Conserve of Flowers of Barage and Bugloss each one ounce, of Conserve of Rosemary flowers one ounce, of candied Citron-peel, of nutmegs candied, and of Venice Treacle, each three drams, of Confection of Alkermes two drams; mingle them and make an Electuary, whereof let him take the quantity of a small Nut morning and evening, drinking upon it six Spoonfulls of the following Julep.

Take of the Waters Meadow-sweet and Treacle each three Ounces, of Sprup of Gilliflowers one ounce; mingle them.

Or instead of this I give some simple Epidemick Waters sweeten'd with Sugar: I forbid the use of Glysters, and order the sick to eat Oatmeal and Chicken-broth, and the like.

As to the Cure of *Quartans*, I suppose every one who is but little conversant in this Art, knows how unsuccessful all the Methods have hitherto been, which are designed for the Cure of them, except the *Peruvian Bark*, which indeed oftener stops it than conquers it; for after it has ceased a Fortnight or three Weeks, to the great advantage of the Patient, who having been severely handled by it, has a little breathing-time, it begins again afresh, tormenting him as bad as ever; and for the most part, how often soever the Medicine be repeated, it requires a long time before it can be vanquished; yet I will mention what I have observed concerning the Method of giving it.

But you must take Care not to give the *Jesuit's Powder* too soon, before the Disease has a little wasted it self; unless the weakness of the Patient requires it should be giving sooner, for the giving of it too soon may render it ineffectual, and endanger the Patient's Life, if a sudden stop be put to the Fermentation of the Blood, whilst it is endeavouring earnestly Despumation. In the next place, no part of the febrile matter must be evacuated by purging, much less by bleeding; for by either of them the Economy of the Blood is weakened, and so the Fits may more readily and certainly return as soon as the vertue of the Powder is gone. I think it is better to tincture the Blood leisurely with the foresaid Medicine, and a good while before

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fore the Fit, than to endeavour at once to hinder the Fit just approaching; for by this Means the Remedy has more time to perform its business thoroughly, and then the Patient is freed from the danger that might happen by a sudden unreasonable stop, whereby we endeavour to suppress the Fit that is now about to exert it self with all its might. Lastly, the Powder must be repeated at such short Distances of time, that the vertue of the former Dose be not quite spent before the other be given; for by the frequent Repetition a good Habit of Body will be recovered, and the Disease wholly vanquished. And for these Reasons I like this Method better than any other.

Take of the Jesuit's Powder one Ounce, of the Conserve of red Roses two Ounces; mingle them.

Let the Patient take the quantity of a large Nutmeg morning and evening daily, of those Days the genuine Fit does not come, till he has taken all the Confection, and let it be repeated once a Fortnight for thrice,

And perhaps the Bark may be used with as good Success in Spring and Autumnal *Tertians*; but to speak the Truth, and not to be boast absurdly of Art, if the Patient seized with any of these *Agues* be either an Infant, or Young, it's best (as far as I yet understand) to use no Medicine at all, nor to change the Air or Dyet, for I never found hitherto any ill from thence, if the business be wholly left to Nature, which I often observed with admiration, especially in Infants; for the Blood having performed its Depuration, these *Agues* go off of themselves. But on the contrary, if a strict Course of Diet be order'd or purging Medicines given (for they use to be prescribed forsooth to open Obstructions, and to carry off the Humors lodged in the first Passages; or if especially bleeding be used in an Epidemical Constitution) it comes to pass that the Disease is much prolonged, and the Patient exposed to a thousand dangerous Symptoms. But if the Patient be ancient, there is great Danger in both Diseases, I mean Autumnal *Tertian* and *Quartan*, not only of their long continuance, but also of Death it self; therefore in this Case the Physician ought to act so, as that if he cannot take off the Disease, neither by the Bark nor any other Method, he should at least assist Nature, so that she may

may be able to perform her own Work; for certainly in weak Bodies, unless the Fermentatiou be kept up by the help of Cordials and a strengthening Diet, as with Worm-wood-wine, and the like, the Patient will be weaken'd, and troubled with uncertain and fruitless Fits, and the Disease will continue long; so that Nature being very languid, and seized with a grievous Fit, cannot reach the time of Ebulition, so he dies in the cold Fit. And this frequently happensto old Men, that have been weaken'd by a long Course of Catharticks, and sometimes they die in the shaking of the first Fits, whereas they might have been kept up, for some time at least, by some strong Cordial.

When the Blood has passed the time that is requisite for perfecting its depuration, ancient Patients must at that time remove to another Air very different, or which is better, into some warmer Country, or at least should leave the place where they were first seized with this Disease. It is indeed strange how much the change of Air prevails for the total extirpation of this Disease; but the change of Air before this time is not proper; for tho' any one should remove into a hot and Southerly Country, yet it is necessary that the Blood settled in this sickly disposition should finish its depuration: And it will be in vain to expect any benefit from an unusual and new Air, till the motion of the Blood proceeding and growing perfect, is capable of recovering Health; a considerable alteration of the Air is therefore then to be appointed, when the Sick is freed from the Fit: For Instance, in a Quartan which first began in Autumn, the Air must not be changed till the beginning of February; but if the Patient will not, or cannot conveniently remove, he ought at this time to use some strong Medicine, so powerful, as may be able at once to promote the languid depuration; and if possible to perfect it.

Take of the Eleſtuary of the Egg, or of Venice Treacle, one Dram and half, dissolve it in two Ounces of Aqua celestis; or of common Aqua vitæ; give it two hours before the Fit.

I have used this with good success at the declination of such Diseases; but hot things given sooner have either

doubled the Fits, or changed them into a *Continual Fever*; as was long ago observed by *Galen*. The same may be given with caution to young People in this Disease: But I have long ago found them prejudicial to Children.

But before I leave this Argument, I must acquaint you, that those things which have been spoken of the duration of *Autumnal Agues*, and of the time required for the despumation of the Blood, are so to be understood, viz. that we respect now only that which Nature is wont to perform by the Assistance only of common Medicines; for we have not designedly discoursed so of these things to discourage Learned and Diligent Physicians from searching for better methods of Cure, and more effectual Remedies, whereby they may hasten the cure of such Diseases: Indeed I am so far from thinking so, that I do not despair of finding out one Day, such a Method or Remedy.

The Disease being removed, care must be taken that the Patient be Purged, for it can scarce be imagined how many Diseases are occasion'd by the omission of Purging after *Autumnal Agues*; and I wonder this is taken so little notice of, and no more provided for by Physicians: for whenever I have seen these Diseases happen to People somewhat in years, and Purging was neglected, I could certainly foretell that some Dangerous Disease would befall them, tho' they had not the least thought of it, being as it were perfectly recovered.

But the Patient must not be Purged before the Disease is quite vanquished: For tho' the natural Parts may seem by this means to be freed from the filth which the *Ague* had cast upon them, yet fresh Matter will suddenly spring up, being supplied by the *Fever* returning again by reason of the force of the Catharticks, and the agitation of the Humours: And so all we gain by Purging is the rendering the Disease more stubborn. And we find this daily by examples of those who (yielding to that Theory, which places all the hope of cure in opening Obstructions, and in evacuating the melancholy Humour, which is vulgarly reckon'd the cause of this Disease,) are miserably punish'd by Catharticks, repeated at the declination of the Disease: And indeed, whatever that Humour be which is evacuated with them, it is apparent that the *Fever* is more rooted thereby, and obstinately maintains its ground, by being provoked. Wherefore I by no means give a Purge before

fore that time wherein the perceptible Fits are quite gone, and also that alteration, how little soever it be, that is felt on those Days whereon the Fit ues to come; and moreover, till a Month be past; after which I prescribe some Lenitive Potion, and I order it should be repeated once a week for two or three Months following, and after every Purge an Anodyne at Bed-time, the Medicine having done working, to prevent the coming of the the Fit afresh, which perhaps might be otherwise occasion'd by the tumult the gentlest Purges raise.

Therefore I purge at such a distance of time as may free the Patient from the fear of a Relapse, which truly may be easily occasion'd by the agitation of the Humours, and too frequent Bleeding. But when this Danger is over, the following Apozem may be used often,

Take of Monks Rhubarb two Ounces, of the Roots of Asparagus, Butchers-broom, Parsley, and Polipod of the Oak, each one Ounce, of the middle Rind of an Ash, and of Tamarisk, each half an Ounce, of the Leaves of Agrimony, Ceterach, and Madienbair, each one handful, of Sena cleansed one Ounce and half, sprinkled with three Ounces of White-wine, of Dodder of Tyme half an Ounce, of Agavick trochiscated two Drams, of Fennel-seeds four scruples; let them be boil'd in a Pint and half of Fountain-water; towards the end add three Ounces of the Juice of Oranges; mix with the strained Liquor of the Syrup of Succory with Rhubarb, and of the Magisterial Syrup for Melancholy, each one Ounce and half; make an Apozem, whereof let him take half a Pint every Morning for three Days, and let them be repeated as often as there is occasion.

And now at length, that we may treat of those Symptoms which accompany Agues at their declination, we must take notice, that very few, compar'd with the Autumnal, belong to Agues in the Spring, because they are not so lasting, nor consist of such earthly and malignant Humours.

A Dropsie now and then occurring, is the chiefest, wherein the Legs swell first, and then the Belly also; it is occasion'd by the Blood wasting a great many Spirits, by reason of frequent fermentations, which the diurnity

of the Disease is the cause of, especially in old People; so that being extreamly weaken'd, it cannot any more assimilate the Juices taken in with the Nourishment, whereof a crude and indigested heap is at length put off upon the Legs; and when they are distended so that they can receive no more, upon the Belly also, and so it becomes a true *Dropsie*. But this Disease seldom happens to young Men, unless it has been foolishly brought upon them by Purges repeated frequently in the course of the *Agues*.

But a *Dropsie*, coming from the Cause above-mentioned, is easily cured at first, by Catharticks, and opening Medicines. Nor am I concern'd at the event, when I hear of this Disease proceeding hence, for then I reckon all will go well. I have cur'd them with the *Apozem* above mentioned; without the mixture of any thing more appropriated to the *Dropsie*. But I have observed it is in vain to endeavour the cure of such a *Dropsie* by Purging Medicines, while the *Ague* continues, for by this means the *Ague* is more firmly rooted, and besides, the *Dropsie* will not be taken off. We must therefore wait till the *Ague* is cured, and then we may successfully undertake the Business.

But if this Symptom be so very violent, that the cure of it cannot be deferred till the recess of the *Ague* permits the use of Catharticks, it must wholly be manag'd with the infusion of Horseradish-roots, the tops of Wormwood, and of the lesser *Centaury*, of Juniperberries, Broom-asches and the like, made in Wine, which not only resist this Symptom by restoring the weak Blood, but also help Nature, just about to triumph over the Disease.

Infants are sometimes hec tick after *Autumnal Fevers*, both continual and intermitting, their Bellies are puffed up, swell'd and hard, and they have often a Cough and other Symptoms that Consumptive People are troubled with, and which plainly resemble the *Rickets*, these must be treated in the following manner. Let the Purging Potion be prepar'd, which I have order'd to be taken at the end of *Continual Fevers*, whereof let the Child take one or two spoonfuls more or less according to its Age, in the Morning, for nine Days, omitting a Day or two if there be occasion, the Purge being so moderated, either by encreasing or decreasing the Dose, that it do not exceed five or six Stools a Day. After purging, let the Belly be anointed with some opening Liniment for some Days.

Take Oyle of Lillies and Tamarisk each two Ounces, of the Juice of Briary-roots and Smallage, each one Ounce; let them boil to the consumption of the Juices; add of the Ointment of Marshmallows, and of fresh Butter, each one Ounce, of Gum Ammoniacum dissolved in Vinegar half an Ounce, of yellow Wax a sufficient quantity; make a Lineament,

I have cured a great many Children of the true Rickets by this method.

But, as I said before, great care must be taken that we do not begin to purge till the *Ague* is quite gone; for tho' by this means some Part of the Humour cast upon the natural parts may probably seem to be evacuated, yet sometimes a fresh quantity of ill Matter is supplied by the Fever, which does not only make Purging ineffectual, but the Disease more lasting, for the Reasons above mention'd.

It is worth noting, That when these *Autumnal Agues* have a long time molested Children, there is no hope of recovery till the Region of the Belly, especially about the Spleen, begins to be harden'd and to swell, for the *Ague* goes gradually off as this Symptom comes on; nor perhaps can you any other way better prognosticate the going off of the Disease in a short time, than by observing this Symptom, and of the swellings of the Legs, which are sometimes seen in grown People.

The swelling of the Belly, which comes upon Children after these *Agues*, in those years the Constitution of the Air is epidemically determin'd to propagate *Autumnal Agues*, feels to the Finger touching it, as if the Bowels contain'd some Matter harden'd to a *Scyrrhus*; whereas that which comes in other Years in like appearance affects the touch so, as if there were only a tenity of the *Hypoconders* by Wind under them; which is worth noting, the true Rickets do not often happen, unless in those years wherein *Autumnal Agues* prevail.

The Pain and inflammation of the Almonds, after either *Continual* or *Intermitting Fevers*, first with the Difficulty of swallowing, and afterwards also with hoarseness and hollow Eyes, and an hippocratical Face, certainly betoken, that Death is at hand, all hope of recovery being past; and I have observed, That too large evacuations in Patients al-

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most worn out, and also the long continuance of it, have mutually contributed to the production of this fatal Symptom.

There are many other Accidents which are wont to follow these Diseases, by reason of Purging not used at all, or not rightly used, which at present we will say nothing of, seeing the way of cure in all is almost the same, *viz.* the purging off of the Sediment deposited by the preceding Effluence, because it has occasion'd these ills by its continuance. But it may be proper to discourse here of a Symptom no way contemptible, which will yield neither to Purging, nor to any other Evacuation, especially to Bleeding, but is heighten'd thereby; it is a certain peculiar Madness which follows long *Agues*, especially *Quartans*. The common Methods of Cure are no way beneficial in this case, for by strong Evacuations the Patient becomes a Changeling, and continues so as long as he Lives. I have often wonder'd that Authors have not mention'd this, seeing I have taken notice of it several times. And whereas other sorts of Madness are most commonly cured by large Evacuations, by bleeding and Purging, this can bear neither; for when the Patient is in a manner recover'd, if a Glyster only of Milk and Sugar be but once injected, it will presently begin again afresh; and if we proceed with Purging repeated, and Bleeding. such Evacuations may, indeed, quell the fury of the Disease, but they will certainly make the Patient a Fool, and render him incurable. And it is not strange, if we consider that other sorts of Madness proceed from the too vivid and exalted Crasis of the Blood! But that this is occasion'd by the weakness of the same, becoming rapid by too long a fermentation carried on by the Fever, so that the Spirits are wholly incapable to perform the Animal Function.

I us'd to manage this Disease in the following manner. I prescribe a large Dose of some generous Cordial, to be taken thrice a day; for instance, *Venice-Treacle*, the Electuary of the Egg, the Countesses Powder, Sir *Walter Rawleigh's* Powder, or the like, in Epidemick, or Treacle-water, or some other Cordial Medicines, may be also given in some other form: The Patient is likewise to be comforted with strengthening Dyer, and generous Liquors; he must keep within, and lie much a Bed, the Belly will by this means be bound, so that a Fever may be fear'd

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by some, especially, by reason of hot Medicines taken; but there is really no danger of it, for the Spirits, worn out by the foregoing Disease, are not able to kindle a new Fever; after some weeks, he will grow better by little and little, and then Cordials may be omitted for some days, but the strengthening Dyet must be constantly used, and the use of Cordials must be again repeated after a short intermission, and continued till he is quite well.

The foremention'd Method has sometimes cured Madnes that has not come upon these Agues in those of a cold and infirm Constitution. Last Year I was call'd to *Salisbury*, to consult with the Learned and sagacious Physician, *Dr. Thomas*, my very good Friend, about a Gentlewoman who was disemper'd in Mind, and she was perfectly cured by the Remedies above-mention'd, tho' she was then with Child.

But the common Madnes which is wont to befall brisk People, without any Fever going before, is of another kind, and therefore to be treated with a quite contrary Method as to Evacuations, tho' in this sort also those things that strengthen the Brain and the Animal Spirits are not to be omitted, I will add the cure of this by the by to the foremention'd kind, tho' it does not properly belong to this place, least any should be deceiv'd by the likeness of the Diseases.

In young People of a sanguine Constitution, let eight or nine Ounces of Blood be taken from the Arm twice or thrice, at three days distance, afterwards Bleed once in the Neck, Bleeding oftener rather makes the Patient a Changling than cures him, then give half a Dram or two Scruples of the *Pill. ex duobus*, according as it works, on a set day; For Instance, if the Patient takes the Pills first on a *Monday*, let them be repeated exactly on the same day, and not oftner in the following weeks, for a long time, till he is perfectly recover'd. By this Method the Humours which use to seize the Head, fall gradually on the lower Parts, their course being turn'd.

When the Patient does not purge, let him take the following Electuary, or the like, thro' the whole course,

Take of the Conserve of Roman-Worm-wood, of Rosemary-flowers, and of Venice-Treacle, each one Ounce, of the Conserve of yellow Peel of Oranges, of candied Angellie

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ca, and of Nutmegs candied, each half an Ounce, make an Electuary with a sufficient quantity of Syrup of Gilliflowers: Let him take the quantity of a Nutmeg twice a day, and drink a small draught of Canary after it, where in Cowslip-flowers have been infused cold.

The Continual Fever and Agues which we have described above, were almost the only Epidemick Diseases that reign'd during the Constitution of Years 61, 62, 63, 64; but how many Years they reign'd before I cannot say, but this I certainly know, that from the Year 64, to the Year 67, they very rarely appear'd at all in London.

I should speak something also of the Small-Pox, namely, what those were which then happen'd, Respect being had to that Constitution; for, as I have said, they vary very much, according to the various Constitutions they come in; but having not sufficiently observed them at that time, I now pass them by: I will only say, that this was peculiar to them, that in those Years they raged much about the beginning of May, but the Autumnal Epidemics supervening, they retir'd. Upon the top of the Pustles there were small Pits most commonly, about the bigness of the Head of a small Needle, and in the distinct kind; the Sick was in most danger on the eighth day, at which time sweat or moisture which flow'd hitherto broke off of a sudden, and the external parts were dry; nor could Sweat be recalled by any Cordials, the Sick was seized with a Prensse, and great Anxiety, with great Pain and Sickness; he made Water often, but little at a time; and within a few hours, contrary to expectation, died.

SECT. II. CHAP. I.

Of the Epidemical Constitution of the Year 1665, and 1666, at London.

THE foregoing Winter being extremely cold, and the Frost continuing without any intermission till Spring, it thaw'd suddenly at the end of March in the Year

Year 1665, and *Inflamations of the Lungs, Pleurifies, Quinsies*, and such like inflammatory Diseases, made great slaughter on a sudden, and at the same time a continual Epidemick Fever appear'd. It was very different from the nature of the *Continual Fevers* that reigned in the foregoing Constitution, whereof scarce any were wont to invade at that time of the Year. The Pain of the Head was more violent, and the Vomiting more severe than in the former; and the *Looseness*, which was most commonly prevented in the other Fever by taking a Vomit, was now heighten'd by the same, and yet the Vomiting did not cease: The outward parts were dry, as in the *Fevers* of the preceding Constitution; but after bleeding, the Patient could sweat, and the Symptoms were presently abated thereby. And this might be done at any time of the Diseases, whereas in the former Fever you could not attempt it safely, nor, indeed, could easily obtain your Desire before the thirteenth or fourteenth day. The Blood was often like the Blood of those that have a *Pleurisie*, or a *Rheumatism*, only it had not so white a Jelly upon it. These were at first the *Diagnostick Phenomena* of this Disease, but in progress of the Year, the *Plague* broke out, accompanied with a great number of *Pathognomonick Symptoms*, as *Carbuncles, Buboos*, and the like: It encreased daily more and more, and came to its height about the tenth of *September*, at which time about Eight thousand died of it in the space of a week, tho' two thirds at least of the Citizens went into the Count ry, for fear of Infection. Afterwards it began to decrease, and by reason of the cold of Winter, almost ceased; only here and there One had it all the Winter, and towards the following Spring, at the approach whereof it quite vanished; yet a Fever remained, tho' not so Epidemick, the whole following Year, and even till the beginning of the Spring 1667. Of these I will now treat.

C H A P. II.

*Of the Pestilential Fever and Plague of
the Years 1665, and 66.*

I Have heretofore hinted by the bye, that some Fevers are commonly reckoned malignant, whereas the extrem violence of the Symptoms, which seems to countenance this Opinion, proceeds not from any venomous Disposition of the Disease, but from the ill management of the Cure; for when we do not duly attend to the Solution of the Disease, appointed by Nature, but rashly begin some other Method, we very much disturb the Oeconomy of the whole Body, and turn all things topsie turvey: And for this reason the Disease, contrary to its own Nature, has an woful Aspect, is different from it self, and accompanied with irregular Symptoms, so that indeedit it seems of another kind. But a Fever truly malignant does not happen every Day, and wholly differs from other kinds, that are so called, by reason of the irregularities of the Symptoms; and is truly of the same Species with the Plague, only it is a degree below it; wherefore I will treat of the Rise and Cure of both in the same Chapter.

That such a Disposition or Texture happens to the Mass of the Air, as occasions various Diseases at different times, is manifest to every one that but considers, that one and the same Disease kills an infinite number of Men at some certain Seasons, and at another time seizes only here and there a Man, and goes no further; And this is very apparent in the Small-Pox; especially in the Plague, the Argument of this Chapner.

But what that Disposition of Air is from whence this morbisick Furniture proceeds, we know not, nor many other things, which the doating and arrogant Crew of Philosophers trifle about; whatever it be, upon this account at least, the Clemency and Goodness of Almighty God is to be revered; because pestilential Constitutions of the Air producing the *Plague* (the greatest of all Miseries, and most

most destructive to Mankind) seldomer happen than those that cause less deadly Diseases; so that the *Plague* rarely rages violently in *England* often than once in the space of thirty or forty Years. Some, here and there, die of the *Plague* for some Years after a notable *Pestilence*, and it is wont to go off gradually, by reason the pestilential Constitution of the Air continues still in part, and is not yet wholly changed to another more wholesome; and therefore it ought to be counted only as the Gleanings of the last Harvest. And also the *Fevers*, that reign a Year or two after a deadly *Plague*, are wont to be pestilential for the same reason. And though some have not the Tokens of the *Plague*, yet are the *Fevers* much of the same Nature, and require the like Method of Cure, as we shall make appear hereafter.

But besides the Constitution of the Air, as a more common Cause, there ought also to be another Procatartick, viz. the reception of the Infection, either immediately by accompanying some plaguey Person, or mediately transmitted by Fomes from some other Place; or else if it should happen while there is such a Disposition of the Air, as we have mention'd, a dreadful Fire will presently be kindled by a small Spark, and the whole Air, through that Tract of Earth, would suddenly be infected with the *Plague*, by reason of the Breath of the Sick, and Carcasses of the Dead; so that there will be no more need of a Fomes, or personal intercourse, to propagate this dreadful Disease, but the very Air passing in with the Breath, would be able to destroy a Man of it self, though he were carefully removed from the Infected, if he has a Body furnished with Humours disposed to receive the Infection.

This Disease, when it is only sporadical, afflicts some few promiscuously at any time, the Infection being as it were handed from one to another: But when there is also an Epidemick Constitution of the Air, it begins betwixt Spring and Summer, that being a Season most fit to produce a Disease, whose Essence chiefly consists of an Inflammation, as we shall shew hereafter. Moreover it has its time of increase and declination like other kinds of natural things. It begins at the time we said, as the Year increases it spreads, and as that declines, it decreases, till at length the Winter has changed the Air into a Disposition contrary to this Disease.

For if the changes of the Seasons of the Year have no Power over this Disease, but the Pestilential Seeds being untamable by any alteration of the Air, are transmitted from one to another in a continual Series, it could not be but that when it has once entred into any great City, it should still encrease the Funerals more and more, till by a Continued Destruction, none will at last remain, to whom it might impart its Venom. But that the contrary often happens is plain from the number of the Dead, which increas'd to some thousands in one Week in *August*, but much decreased, and almost quite stop'd at the latter end of *November*. But I do not deny but that it may be, and which also some Authors have affirmed, that the *Plague* has broke out at other Seasons of the Year; yet is it rare, nor is such a *Plague* very raging; besides, I very much suspect that the Disposition of the Air, though it be pestilential, is not sufficient of it self to cause the *Plague*, but that being always in some place or other, it is conveyed by a Fomes, or by the coming of some *Plaguy* Person from an infected place to another, and is not Epidemick there unless also the Disposition of the Air incline to it; for otherwise I cannot understand how it comes to pass, that in the same Tract of Heaven, when some one Town is grievously afflicted with the *Plague*, another not far distant, by warily prohibiting any Commerce with the infected Place, should keep clear of it; as not long ago, when the *Plague* rag'd violetly almost over all *Italy*, it was kept out of the Confines of *Tuscany*, by the Care and Prudence of the Great Duke.

Its first approach is almost always accompanied with shivering and shivering, like the Fits of an Ague, presently violent Vomittings, a Pain about the Region of the Heart, as if it were press'd, a burning Fever, with the usual concurrence of Symptoms perpetually afflict the Sick, till either Death it self, or an happy Eruption of a *Bubo* or *Parotis* discharges the morbidick Matter, and so frees them from that deplorable Condition. It does now and then happen, though seldom, that it comes without any sense of a Fever before, and suddenly kills Men, the *Purple Spots*, which are the forerunners of Death, breaking out as they are about their business. But this sudden Death, which is to be noted, scarce ever happens, but at the beginning of a dreadful *Plague*, and is never, when it remits and is
weaken'd,

weakned, or in Years wherein it is not epidemical. It sometimes also happens that Swellings appear, when neither a Fever, nor any other violent Symptom went before. But I suppose that some little Shaking or Shivering, though less perceptible, always precedes. They that are after this manner may safely walk about the Streets at Pleasure, and do their business, as if they were well, not minding any Regimen.

As to the Essence of this Diseases, I do not pretend to define it exquisitely; and perhaps, he would seem as impertinent to wise Men, who should ask me what constitutes this or that kind of Sickness, as I should, if I should ask him the same Question concerning an Horse, for instance, among Animals, or Betony among Plants. For Parent Nature accomplishes the Generation of all things, which any time she brings to light from the Bosom of Causes, by most certain Rules only known to her self, and hides their Essence, Quiddities, and constitutive Differences in the greatest Obscurity. Hence every Species of Diseases, no less than of Animals or Vegetables, is always allotted Affections peculiar to it self, and univocal, flowing from its Essence; and yet notwithstanding that Question will not be very considerable, viz. How we should cure Diseases, when we know not their Causes; because the cure of most Diseases is performed, not by the knowledge of the Causes, but by a proper Method approved by Experience. But to return to the business, because we are wont to deduce the arise of all similar Diseases from a Fault of the first or second Qualities (which we can only do by reason of our great ignorance of things) it is probable, that the Plague is a peculiar Fever of its own kind, proceeding from an inflammation of the most spirituous Particles of the Blood: Forasmuch as they seem most adequate to its subtle Nature, and if it exert the greatest Subtlety wherewith it is endued, it suddenly dissipates the native Heat, and so kills the Sick, as is seen at the beginning, and state of an Epidemick Constitution, the Corps of those who are so suddenly destroyed by the violence of this Disease are all over disfigured with the Purple Spots, the Fibres of the Blood being broken in pieces, by reason of the violence of the inward Conflict, and the Frame of it quite dissolved: And this Tragedy may be acted by reason of the great subtilty of its Flame, even without any febrile Ebullition of the Blood.

though the innermost Recesses of the Body like Lightning, and suddenly destroys the Spirits of the Blood, and dissolves its Frame, before oppressed Nature can raise a febrile Ebullition, the usual means whereby she endeavours to remove whatever is offensive to the Blood.

If any one be dissatisfied with my Opinion, *viz.* That this Disease is occasioned by an Inflammation; let him consider, that not only the Presence of a *Fever*, but also many other things favour this Opinion: For instance, The colour of the Blood taken away, which is like that of those who have a *Pleurisie* or *Rheumatism*, the adult appearance of a *Carbuncle*, not unlike the Impression of an *actual Cautery*, the *Bubo's* which are as much inclined to an Inflammation as other Swellings of any other sort, and they end in *Abscesses*, as most Inflammations are wont to do; and also the Season of the Year wherein an *epidemic Plague* breaks out, most commonly seems to confirm the same; for at the same time, *viz.* betwixt Spring and Summer, *Pleurisies*, *Quinsies*, and other Diseases that proceed from an Inflammation of the Blood are wont to be epidemic; and I never knew them more common than they were some Weeks before the beginning of the *London Plague*; but it is of no importance that that very Year, so dreadful, by reason of the destruction of many thousands, was otherwise very mild and healthy, and that all that escaped the *Plague* were better in Health; and also, that those who recovered it were afterwards freed from ill Habits, and other ill dispositions frequently occasion'd by the Relicks of former Diseases. And moreover, that the *Imposthumated Carbuncles* after the inflamed Particles were carried off by the Matter, were easily cured by ordinary Chirurgical means.

But perhaps some one may ask how it comes to pass, that hot Medicines, such are almost all *Alexipharmicks*, should be used with good Success, both for the Cure of the *Plague*, and for Preservation from it, if it consists of an Inflammation? To this I answer, These things do good only by accident, *viz.* by the benefit of Sweat they produce, whereby the inflamed Particles of the Blood are ejected. But if they do not cause Sweat when they are taken, as it very often happens, the flame of the Blood, encreased by their adventitious Heat, soon proclaims openly the mischief of them. In short, as to Preservation, I know, that the use of hot Antidotes is also every where commended, but
with

Blood, or sense before of any other sickness, otherwise than that it most commonly happens, when the morbidick Cause is not so subtle, and the Weapon more obtuse wherewith it assaults Life. The manner of the Difference may be thus represented: For instance, if a Needle, or any other like thing be put under a Pillow, and forcibly press'd, it does not lift it up, as some things of a duller point would do, but perforates it: But this kind of sudden Death seldom happens, and only, as we said before, at the beginning or increase of the *Plague*. For most commonly as in other *Fevers*, shaking and shivering first invade, and heat presently succeeds, which continues till the inflamed Particles of the Blood are banished to the Emunctories, by the provident conduct of Nature, and they are turned to Matter after the manner of common Phlegmons: But if the inflammation be less, it is wont to produce those *Fevers*, which are commonly call'd *Pestilential*, and that often happen at the end of a *Pestilential Constitution*, and perhaps a Year or two after, till that Species of *Fevers* quite disappears.

I suppose that Inflammation which is call'd an *Erysipelas*, is much like the *Plague*; for it is reckon'd by the best Physicians, a continual *Fever*, proceeding from the thinner part of the Blood; from which, that Nature may free her self, she expels it to some outward part, whereon a Tumour, or rather red broad Spots, dispersed (for a very visible Tumour does not often appear) arise; which they call an *Erysipelas*. But the *Fever* goes off critically by this swelling, after it has afflicted the Sick a Day or two: And moreover, there it sometimes a pain in the Glandules of the Arm-pit, or Groin, as in the *Plague*, and it begins also almost like it with shaking and shivering, and a febrile Heat following; so that they who have not had this Disease before, think they are seized with the *Plague*, till at length it shews it self in the Leg, or some other Parts. And truly some Authors have supposed, that there was somewhat of Malignity in this Disease; and therefore have proceeded in the Cure of it with Sweats and Alexipharmicks. This Flame soon goes out of it self, and does no further mischief, when by means of the Ebullition the torrid Particles of the Blood are cast out.

But the *Plague* far exceeds an *Erysipelas*; for, by reason of the great Tenuity of its Substance, it is fitted to pass through

with what Success, is not yet proved. Indeed it is rather probable, that Wine drunk too freely, and other strong Preservatives taken daily at set Hours, have cast many into this Disease, who otherwise might not have had it.

As to the Cure of these Fevers, some perhaps may count me rash and arrogant, for pretending to write of this Disease, being several Miles distant from the City, the greatest part of the time the *Plague* reigned, and so not sufficiently furnished with Observations: but seeing more skillful Physicians, who bravely ventur'd to continue, during so very dangerous a time, have not yet published those things they frequently observed concerning the Nature of this Disease, I hope all good Men will pardon me for publishing my Opinion concerning this dreadful Disease, raised from my own Observations.

As to the Cure of these Fevers, the Curative Indications are first to be minded, which in general are so to be directed, that either exactly following the Guidance of Nature, we assist her in expelling the Diseases; or not trusting to the Method she is wont to use in vanquishing this intestine Enemy, we substitute by Art in the room of it a contrary and more safe. But here perhaps some will say, that the Cure of the *Plague* may be performed well enough by *Alexipbarmicks*, great numbers whereof may be found in Practical Authors. But indeed it is very disputable, whether the help these Medicines yield does not rather proceed from the manifest Qualities, whereby procuring Sweat plentifully, they procure a way at the same time for the exclusion of the morbidick Matter, than from any certain occult Virtue allotted them by Nature to expel the Venom of the Pestilential Malignity. Nor may we only bount of these, but also of the *Alexipbarmicks* of other Diseases, viz. Whether they do not relieve the Sick rather by promoting some Evacuation, than by a Specifick Virtue. For instance; in the *French Pox*; he that says, that *Mercury* and *Sarsaparilla* are *Alexipbarmicks*, for the Venom in that Disease, must produce some Examples of Cures, wherein that did sometimes restore Health without Salivation or Stools, and this without Sweat; which I believe will be very difficult for him to do. But to me it seems probable, that the peculiar Remedy, and proper *Alexipbarmicks* of the *Plague* yet lies hid in Nature's Bosom; nor can it be taken thence, but only by a Mechanick Reason.

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But that we may a little more fully consider the former Intention, which requires, that we should assist Nature after her own way and manner, in expelling the Morbifick Matter, it is to be noted, That in a true *Plague* Nature performs her business by some Abscess breaking out in the Emunctories; and so the Matter is cast out, when she her self does not err, nor is violently forc'd out of the way. But in the *Fever* we call *Pestilential*, the same is performed by means of Sweat, through the whole Superficies of the Body. From whence we may learn, that according to the various ways and order which Nature discovers in both Diseases, a different Method of Cure ought to be instituted. For if in a true *Plague* any one endeavours to expel the Matter by Sweat, he proceeds in a Method opposit to Nature, because she attempts to do it by Imposthumes: And on the contrary, he that endeavours to expel the Matter of a *Pestilential Fever* any other way than by Sweat, takes a Course no way agreeable to her Conduct and inclination. But in the true *Plague* it is not yet known by what fit and certain kind of Remedies the ejection of the morbidick matter, that is, the Eruption of the Imposthumes, may be promoted: Perhaps some may suppose, that a corroborating Diet and Cordials may conduce to it: But indeed I should very much doubt, lest the Heat of the Patient should thereby be increased, that is too much already: And as to Sweats I am well satisfied, by experience, that they signifie nothing in this Case; though I do not deny, that after great Sweats, continued for the space of 3 or 4 Hours, and then suddenly stop'd, the Swelling shews it self; but I do not think it is at all occasion'd by the Sweat, because when it is at height, there appears no sign of its Eruption: When it is over indeed, it may follow, as it were, by accident, to wit, when the Sweat has removed part of that Burden, by which Nature was too much oppressed, and the Body violently heated by Cordials, taken to raise it. But how fallacious and uncertain this ejection of the peccant Matter is by Imposthumes, occasion'd by Sweat, the Lamentable end of those testifies, who have been treated after this manner; of which scarce one in three (to speak within Bounds) escapes the danger of the Disease and Cure: But on the contrary, many on whom the Swellings broke out in the right manner, even when they were intent upon their business, and without

any sensible hurt of any Natural, Vital, or Animal Faculty, recovered in a short time, except those who unfortunately falling into the Hands of an ignorant Physician, and composing themselves to Sweat by his Advice, tho' they were very well in Body and Mind, began from that time to grow worse, and their sickness encreasing, they sufficiently demonstrated the injury of this unlucky Counsel by their own Death. But the uncertain Judgment of this Disease by Swellings is manifest; for that sometimes a *Bubo*, which comes out at first well, and with an abatement of the Symptoms, afterwards disappears of a sudden, and instead of it Purple Spots, certain Tokens of Death succeed. The Cause of the going in of the Tumor, seems of right to be attributed to those Sweats, which were designed to further its Eruption, because they dissipated other ways, through the habit of the Body, the chief part of the Matter, which should have served to have kept up the Swelling. However it be, this at least plainly appears, that by the Benignity of Almighty God, certain ways of ejecting the morbidick Matter are appointed in other Diseases, but for this Scourge of heinous Iniquity, only a very uncertain one. And perchance the Cause and Original of this great Destruction may be as properly deduced from hence, as from Malignity; for in the *Gout*, and other Diseases that are not thought to be malignant, the striking in of the morbidick Matter is full as destructive. From all which it plainly follows, that the Physician who is obliged to follow exactly the guidance and inclination of Nature in curing other Diseases, must here renounce her Conduct; the Truth whereof, because few have hitherto sufficiently understood; therefore the number of those whom the *Plague* destroyed was not a little encreased.

Wherefore it being not at all safe to follow the Footsteps of Nature in ejecting this Disease, we must consider in the next place by what means we may satisfy that Intention, which we call the second, *viz.* By instituting a Solution of this Disease, contrary to that of Nature; and this I think can only be done by these two ways; either by bleeding or sweat. As to the first, I know very well that bleeding is much disliked by most in this Disease; but being little concerned at the prejudice of the Vulgar, I will fairly discourse the validity of the reasons in this Question. And first I appeal to those Physicians who

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continued in Town when the late *Plagues* raged, whether they ever observed, that large bleeding, and often repeated, before any Tumour appear'd, was the cause of any ones Death that had the *Plague*. But 'tis no strange thing, that bleeding sparingly, or after the Swelling is come out, should be always hurtful, for when only a moderate quantity of Blood is taken away, the Administration of Affairs is forced out of Nature's Hand, who endeavour'd all she could to cause a Swelling; and yet in the mean while another Method is not substituted that is strong enough to evacuate the morbidick Matter, and bleeding used after the Tumour appears, because it draws from the Circumference to the Center, induces a Motion quite contrary to that of Nature, which is from the Center to the Circumference; and yet nothing is more commonly urged, as a great Argument, by those of the contrary Opinion against bleeding in general in this Disease, than the Injuries of Bleeding used after this perverse manner; as may be seen in *Diemerbroeck*, and other Writers of Observations: As for my self, I cannot agree with their Arguments, till I understand what they answer to the Questions above proposed; for many Authors, and those of the best Reputation too, have thought Bleeding Proper in the *Plague*, the chief of whom are, *Ludovicus Mercatus*, *Josanes Costeus*, *Nicolaus Massa*, *Ludovicus Septalius*, *Trincavellius*, *Forestus*, *Mercurialis*, *Altomarus*, *Pasebalius*, *Andernachus*, *Pereda*, *Zacutus Lusitanus*, *Fonseca*, and others: But there is but on that I know of, who places the whole business of the Cure in as large Bleeding as we require, viz. *Leonardus Borallus*, one of the most famous Physicians in the former Age, whom I will quote, lest I should be thought singular in this Practice. In a Word, says he, I think there is no *Plague* in which this may not be better than all other Remedies, so it be used opportunely, and in a convenient quantity; for I suppose it is found unprofitable sometimes: For that either it is used too late, or less is taken away than ought to be, or an Error is committed in the using of it both ways: And a little while afterwards he adds, But in so great Timidity, and sparing Phlebotomy, how can it be that any should judge exactly how much good or harm it may do in the *Plague*? For if a Disease (for the cure of which the taking away of four pounds of Blood was required, and but one pound was taken away) kill a Man, it does not therefore destroy him

because he was blooded, but because it was not done in a due manner, nor perchance seasonably: But sloathful wicked Villains always endeavour to put the Fault on that, not for that it did hurt, but because they basely desire to have it disliked by all: Or if they do not do it wickedly, they do it ignorantly, by a pervers. custom; both certainly are pernicious, but that most of all. All which being about to confirm by Experience, a little after he thus proceeds: These things being observed, no reasonable Man can well dispraise Bleeding in these Diseases, but rather wonderfully commend it, and confidently use; which Indeed I have done for these several Years, and in Pestilential Diseases at the Siege of *Rockell*, and four Years ago at the Mountains of *Hainalt*, and for these two Years at *Paris*, and the last year at *Cambray*. I found no Remedy speedier and safer in all my Patients, which were innumerable, than large and seasonable Bleeding.

And afterwards he delivers some Observations, which for brevity sake I here omit, but will relate a very rare Case, and suitable to our purpose, of a Business perform'd in *England* many years ago; when among the other Calamities of the Civil War, that miserably afflicted this our Country, the *Plague* also raged in many places; it chanced to be brought from another place to the Castle of *Dunstar* in *Sumerfetshire*, and some of the Souldiers dying suddenly with an eruption of Spots, it seized many others, at which time a Surgeon, that had been a great Traveller, was a common Soldier there, who humbly entreated the Governour of the Castle to permit him to do all he could for the relief of his Fellow-Souldiers, that were afflicted with this dreadful Disease; and having obtained leave, he took away a vast quantity of Blood from every Sick Person at first coming of the Disease, before there was any sign of a Swelling; he Bled them till they were like to drop down, for he Bled them all standing, and in the open Air, nor had he any Porringer to measure the Blood; afterwards he order'd them to lie in their Tents; and though he gave no Medicine at all after Bleeding, yet, which is very strange, of those very many which he treated after this manner not one died. Mr. *Francis Windham* gave me this account, who was then Governour of the Castle, and is indeed a Gentleman, and remarkably honest.

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nest, and is now living, so that any one may be satisfied that doubts the Truth of it.

I will mention what I have observed worth Note, concerning this thing, when I come to treat of those few Remarks I made by my own Experience, while the late *London Plague* raged.

But tho' in my Judgment I approve of this Practice, and have experimentally found the usefulness of it long ago, yet the dissipation of the Pestilential Ferment by Sweat pleases me better, upon many accounts, than the Evacuation of it by Bleeding, because it does not weaken the Patient so much, nor hazard the Physician's Reputation: But this has also its Inconveniences; for first many, especially young Men of a hot Constitution, sweat difficultly; and in such, the more you endeavour to force Sweat by strong Diaphoreticks, and by heaping on a great many Cloaths, so much the more are they in Danger of a falling into a Phrensie; or which is yet worse, after having been entertain'd a while with vain Hopes, the *Tokens* are drawn out instead of it; for the chief Venom residing in the most spirituous part of the Blood (the motion of the grosser Particles being on this account somewhat more weak than is usual in other Inflammations) that tender Partiton becomes very furious by the accession of this new heat, and at length breaks in pieces all the Fibres of the Blood distended beyond the bounds of their Texture; which dissolution of the sanguineous Fibres, I suppose, is the cause of the *Pestilential Tokens*, for they are first intensely red, and soon after livid or black, like stripes inflicted by a violent Blow on some fleshy part of the Body.

And then in those Bodies which are easie to Sweat, If it be stop'd too soon, viz. before the morbidick Matter is wholly dispers'd, the condition of the *Buboes* is afterwards worse, which began to come out well at the later end of the Sweat; for that part of the Matter being subtracted which should serve to elevate them, they either soon strike in, or at last never come to true Abscesses (as is wont to happen in the *Small-Pox*, when the sick has sweat violently at the beginning of the Disease) but the dreadful Enemy, being again taken in, a commotion is stirred up in the Blood, whereby the Purple Spots, the Tokens of a sudden Death are often driven out in the manner we have mention'd above.

But that it may more clearly appear by what means we may obviate these and the like difficulties, I will faithfully set down what has been done and observed by me, so far as I was able, in this Disease, beginning from the rise of the late *Plague*.

At the beginning of May 1665, I visited a Noble Lady about 21 Years of Age, of a sanguine Complexion; besides the *burning Fever*, which began a little before, frequent Vomitings and other febrile Symptoms troubled her. I began the Cure with Bleeding; and the next Day, to prevent a *Looseness*, (which, as I mentioned in the beginning of this Treatise, was wont to come at the latter end of the *Fever*, when a Vomit was omitted, which the inclination to Vomiting at the beginning of the Disease required) I order'd a Vomit that cleansed her Stomach very well, the Day after visiting her again, I found she had a *Looseness*, which being very unusual for some Years, did not a little perplex me; but thereby I perceived this was no common *Fever*, as the Event shewed, and therefore required another Method of Cure, different from that I delivered in another place, which I had hitherto used with continued Success; wherefore, another Elder Physician being called in to assist me, Bleeding was repeated by our joint Consent, which the Age and Constitution of the Sick, and the violent Ebullition of the Blood seemed to require; and also moderate cooling Cordials were order'd, and Glysters injected every other Day. At the latter end of the Disease we prescribed some stronger Alexipharmicks, because very unusual and irregular Symptoms invaded, commonly accounted the Signs of a great Malignity. But all doing no good, she died about the fourteenth Day. I had many thoughts for some Days after about the odd disposition of this *Fever*, and at length remembering the violent heat which continued, even after repeating Bleeding, that there was a redness in the Cheeks, and some drops of Blood flow'd from her Nostrils a little before her Death, and that also the Blood, when it was cold in the Porringers, was like that which is taken from those that have a *Pleurisie*; moreover, that she had a Cough and obscure Pains in the Vital Part; besides, that Season of the Year approached, which contains the end of the Spring and beginning of Summer, and which is less disposed for the production of Continual Fevers, (for these, of their own ac-

cord, at this time, either turn to *Agues*, or suddenly change to *Pleurisies*, or other Inflammations of the like kind;) and lastly, that *Pleurisies* at that time were very Epidemical. All these things, I say, being duly weigh'd, I was of the Opinion, that this *Fever*, though it wanted the Pathognomonical signs of a *Pleurisie*, had the importance of a Symptom, on the account of a certain Inflammation lurking about the Vital Parts, though there was no Pain of the Side, and no considerable difficulty of breathing. In a word; I was at length perswaded, that I ought wholly to have proceeded in the fore said Case with the same Method I had often used with good Success in a *Pleurisie*. And truly it afterwards succeeded as well as could be wish'd; for, being call'd a little while afterwards to a Man that was ill exactly after the same manner, I began and finish'd the Cure by repeated Bleeding, as is commended in a *Pleurisie*. About the latter end of *May*, and the beginning of *June*, very many desiring my Assistance, were recovered from this *Fever* (which was then very Epidemical) by the fore said Method. From this time that dreadful *Plague* began to rage cruelly, which at length was so very Mortal, that in the space of seven Days it destroy'd so many Thousands in this one City.

But whether the *Fever*, of which we have now Discours'd, deserve the Name of the *Plague*, I dare not confidently affirm; but this I know experimentally, that all that were seized with the true *Plague*, at that time; and some time after in my Neighbourhood, with all the Symptoms peculiar to it, had the same concurrence of Symptoms, both at the first coming of the Disease, and in the whole course of it: But when I was endanger'd by the near approach of the *Plague* to my own House, at length, by perswasion of Friends, I accompanied the vast numbers of those that left the City, and removed my Family some miles from thence; yet I return'd so very soon, and when the *Plague* continued so very violent, that it could not be but, by the reason of scarcity of better Physicians, I should be call'd in to the assistance of those that had the *Plague*: And not long after I visit'd many that had *Fevers*, which I perceiv'd, not without great admiration, was the same that I manag'd so successfully before my departure; and therefore concluding in my own Experience, as a Guide to be preferred before all other Precepts I did not doubt to order

Bleeding again. I continued this course of Bleeding plentifully, together with the use of a *Ptisane*, and such-like cooling Diet in many Patients, with very great Success, till at length I miscarried in the management of some, by reason of the frowardness of the by-standers, who being possess'd with vain Prejudices, would not suffer me to take away a due quantity of Blood, (to the great damage of the Sick, from whom a sufficient quantity, or none at all, should have been taken away, seeing the stress of the Case depended on it) and perceiving a great Obstruction to my Designs, I therefore thought the finding out of some other Method in curing this Disease, beside that of bleeding, would be of great use. I will instance an Injury I once did, but without Guilt; not because I let Blood, but because I was not suffer'd to take away so much as was necessary. Being sent for to a young Man of a sanguine Complexion and strong Constitution, who was seized with a violent Fever two days before, with giddy Pains of the Head, violent Vomiting, and such like Symptoms, and finding upon enquiry that he had no sign of a Swelling, I presently order'd that a large quantity of Blood should be taken away, the Superficies whereof, when it was cold, represented the corrupted Blood of Pleuriticks; and I prescribed also a *Ptisane*, with cooling Juleps and Broaths: In the Afternoon he bled the same quantity, and so the next Morning, and towards the Evening of this day I visited him, and found him much better; yet notwithstanding I perceiv'd his Friends violently oppos'd the taking away any more Blood; but I earnestly contend'd that it should be repeated again, saying, he need be blooded but this time only, and then he would be out of danger; but that if they should continue obstinate, it had been better that no Blood had been taken away, and that the Cure had been carried on by Sweat; and, in short, that the Patient would most certainly die. The Event confirm'd the Prognostication; for while we were disputing about the thing, we lost the opportunity of doing it, for the next day the purple Spots broke out, viz. the relics of the peccant matter, which ought to have been wholly evacuated, (because bleeding so often repeated had taken away all hopes of an Abscess) by delay perverted the whole Mass of Blood, and broke the Texture of it by its great subtilty, and the Patient died in a few Hours.

Therefore

and Plague of the Year 1665, and 66. 73

Therefore when I had often met with such Obstacles, I earnestly endeavoured to find out, if possible, some method of Cure that might be as effectual, and not so displeasing; and having much and long consider'd of these things, at length I fell upon this method, which I found afterwards to be perfect in all respects, and always beneficial.

First, If the swelling has not yet appeared, I Bleed moderately, with a respect to the strength and constitution of the sick, and afterwards the sweat is easily and soon raised, (whereas otherwise it is not only difficultly procured in some bodies, but there is also danger lest the Inflammation should be heighten'd thereby, and so the *Tokens* forced out) and the benefit of the Sweat immediately following, abundantly compensates the loss of Blood, which, how little soever it be, would otherwise be very injurious. After bleeding (which must be performed in bed, when all things are in a readiness to promote sweat) without any manner of delay, I order'd the Patient to be covered quite over with Clothes, and that a piece of Flannel be bound to the fore-part of his Head; and indeed this covering of the Head conduces more to the procuring sweat than any one would easily imagine. Afterwards, if the Patient does not vomit, I give these and the like Sudorificks.

Take of Venice Treacle half a Dram, of the Electuary of the Eggs one scruple, of compound Powder of Crabs-eyes twelve Grains, of Cochinele eight Grains, of Saffron four Grains, with a sufficient quantity of the Juice of Kermes; make a Bolus, which let him take every sixth hour, drinking after it Six Spoonfuls of the following Julep.

Take of Carduus-water, and compound Scordium-water, each three Ounces, of Treacle-water two Ounces, of Syrup of Gilliflowers one Ounces; mingle them, and make a Julep.

But if the Patient be troubled with Vomiting, as he is very often in the *Plague*, and other *Pestilential-Fevers*, I defer the giving Sudorificks till he begins to sweat by means of the Covering only, excepting that sometimes I put part of the Sheet over the Face; for, which is well worth observation, when the Rays of the Morbifick matter extend themselves to the Circumference of the Body, the Looseness

ness and Vomiting, which were occasioned by their being inwardly reflected, and cast upon the Stomach and Bowels, cease presently of their own accord; so that how great soever the preceding Subversion of the Stomach is, the Medicines that are taken afterwards are easily retained, and procure Sweat as well as can be wished.

I remember, that being once called by an Apothecary to visit his Brother who was very ill of a *Pestilential Fever*, and speaking of giving him a Sudorifick, he told me, That he had taken various and strong Medicines to procure Sweat, but all in vain, for that he had vomited them all up: I answer'd, That he should prepare the most loathsome and ungrateful of all that before he had given, and that I would take care that he should not vomit it up any more. The Event confirmed what I promised; for when the Patient had sweat a little, only by the weight of the Clothes, he retain'd a large Bolus of *Venice-Treacle*, whereby sweating plentifully, he recover'd. But to return to the business; I order, that the Sweat should be continued for the space of a natural Day, by Sage Posset-drink, or Mace-Ale, now and then taken; and I strictly forbid that the Patient should be any way cleansed, neither indeed to I permit that the Shirt, how moist or foul soever it be, should be changed within twenty four hours from the end of the Sweat; which I would have observ'd with the greatest Caution; for if the Sweat does not continue so long, the violence of the Symptoms soon returns, and the Health of the Patient is left very uncertain, which a longer continuance of the Sweat would have put out of danger. And indeed I much wonder at *Diemerbroeck* and others, when I consider upon how slight a Pretence they are induced to break off the Sweet, *viz.* That they may preserve the Strength of the Sick; for, first, every one that is but very little acquainted with the Cure of this Disease, knows that the Patient, while he sweats, is stronger than he was before: What *Use* and *Experience* hath taught in this case, I will not fear to defend and declare openly. Many that have been sweated by my Advice, for the space of twenty four Hours, have been so far from complaining of their being weakened thereby, that they have professed, that as much as the useless Humor was carried off, so much new Strength they received: And towards the latter end, I have often observed with admiration a Sweat break out
more

more natural, genuine, and copious than the former, which was forced out by the Medicine, and gave more relief, as if it were truly critical, and did eradicate the whole Disease. Moreover, I cannot see what Inconvenience there would be in refreshing the Patient with comfortable Soap and Broath, when the Sweat is at height, and then that Objection concerning want of Strength to bear long Sweats would signifie nothing. If therefore any Defection be perceived towards the latter end, I permit him to take a little Chicken Broth, the Yolk of an Egg, or the like, which with Cordials, and Droughts commonly used to keep up the Sweat, abundantly repair the Strength. But there is no need of many Arguments in a thing so obvious; for it is manifest, that as long as the Patient sweats, he thinks himself in a good Condition; and the By-standers also suppose that the worst is over, which openly proclaims the utility of this Practice; but as soon as the Sweat is stopped, and the Body begins to dry, he falls ill again and there is as it were a Relapse.

I order that cold Beer be carefully avoided, that the Cloaths dry of themselves on the Body, and that all Drinks are somewhat hot, and that the use of Sage Posset-drink be continued twenty four hours after the Sweat. The next morning I give a Purge of the infusion of Tamarinds, of the Leaves of Sena, of Rhubarb, Manna, and the Syrup of Roses Solutive; and by this Method I cured many of *Pestilential Fevers* the next Year after the *Plague*, so that not one died of this Disease, that was under my Care, after I began the use of the same.

But when there has been a Swelling, I have not yet dared to bleed, tho' in a Body unapt to sweat, lest the sudden Death of the Patient should prevent the Sweat designed, chemorrbick Matter flowing back to the empty Veins. Yet perhaps Bleeding may be very safely used, if without any manner of delay Sweat be procured presently after it, which being continued to the space above mentioned, may be able to disperse, and consume by degrees the whole bulk of the Humour, and with much less danger than when a legitimate maturation of the Imposthume, which is very uncertain in so very acute a Disease, is long waited for.

To conclude, If the Reader shall find that I have any where erred about the Theory, I beg his Pardon; but as to Practice, I declare I have faithfully delivered all things
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and that I never propos'd any thing before I had thoughtly try'd it. Indeed when I come to die, I trust I shall have a chearful Witness in my Breast, that I have not only with the greatest diligence and honesty endeavour'd the Recovery of the Health of all that have committed themselves to my care, of what Condition soever they have been, of whom none was otherwise treated by me, than I desire to be, if I should happen to have the same Diseases; but that also I have labour'd to the utmost of my Power (if by any means it might be) that the Cure of Diseases; may be managed after I am Dead with greater certainty, esteeming any progress in this kind of Knowledge, how small soever it be, though it teach no more than the Cure of the Tooth-ach, or of Corns, to be more valued than the vain Pomp of nice Speculations, which are no more useful to a Physician in the Cure of Diseases, than Skill in Musick to a Carpenter in Building.

In the last place, I will add only this short note, lest perchance any one should wrest my Opinion by a sinister Interpretation, or at least, not thoroughly understand it, viz. That in the preceding Discourse I often use the word Nature, and attribute various Effects to her, as if I would represent under this Title some one thing subsisting of it self, and spread every where through the whole Machine of the World, which being endued with Reason, governs all Bodies, such a thing as some of the Philosophers seem'd to think was the Soul of the World. But as I do not affect novelty of Things, so neither of Words; and therefore I use in these Pages the ancient Word indeed, but in a sense, unless I am deceived, both sober, and not only understood, but also used by the best Men; for as often as I mention Nature, I mean a certain complex of natural Causes, which are governed by the best Counsel in performing their Operations, and accomplishing their Effects, though they are without Reason, and destitute of all Skill, viz. the supream Deity, by whose Power all things are produced, hath so dispos'd all things by his infinite Wisdom, that they betake themselves to their appointed Functions, doing nothing that is vain, but that which is best and fittest for the whole Fabrick of things, and their own private Nature, and so are moved like Engines, not by their own Skill, but by that of the Artificer.

S E C T. III. C H A P. I.

*Of the Epidemick Constitution of the years
1667, 68, and part of the Year
1669. at London.*

IN the Year 1667, about the *Vernal Equinox*, the *Small-Pox*, which during the foregoing pestilential Constitution were quite extinguished, or rarely appeared, began to break out and encrease daily, and about Autumn became Epidemical; from which time, the Winter coming on, they decreased; but the next Spring they returned, and continued till they were restrained as before by the following Winter; afterwards they did again a third time encrease with the Spring. But they were not so universal as in the two foregoing Years; and in August 1669, they quite vanished, and were succeeded by an *Epidemical Dysentery*. The first two Years wherein this Constitution reigned, the *Small-Pox* were more universal then ever I knew them before or since; and yet being gentle at that time, and of a good sort, they killed few, with respect to the great number of those that had them.

At the time wherein the *Small-Pox* first broke out, a new *Fever* arose, not much unlike the *Small-Pox*, if you except the eruption of the Pustles, and the Symptoms which depended on them, whereof we will speak particularly hereafter. This *Fever*, though it did not seize near so many as the *Small-Pox*, yet it continued as long. But in the Winter, when they decreased, this prevailed; and when they returned in the Spring, this receded, leaving in this manner the Dominion of Epidemics of this Constitution to them: yet it did never quite cease at these times, till at length in August, 1669, the *Small-Pox* and this *Fever* went of together.

A third Disease accompanied these two Epidemics, especially the last Summer, which the said Constitution defamed, viz. a Looseness, the Constitution of the Air inclining to the following *Bloody-flux*. But however these things were

were, it was manifest, that this Disease was nothing else but the *Fever* turned inward upon the Bowels.

I will treat particularly of these three Diseases, which were the only Epidemics, of this Constitution. I begin with the *Small-Pox*, and will treat largely of them, because those of these years seem more regular than others, the *Phænomena* being the same. and accompanied with the same Symptoms in all that were seized; so that they being most perfect of their kind, a true History of the Disease, and the method of Cure may be best taken from them. But it is to be noted, that not only a proper and peculiar *Fever* belongs to every peculiar Constitution, but also a peculiar sort of *Small-Pox*, which resembles this Species, during this Series of Years, but another in the following Years, though they may seem to agree among themselves, as to certain *Phænomena*: common to them all, so does Nature vary in the Generation of Epidemic Diseases. But to return to the Business, I will first set down the History of the *Small-Pox* of this kind, which I call regular, to distinguish them from those that were irregular in the following Years; I will also add the method of Cure, which succeeded as well as I could wish.

CHAP. II.

Of the regular Small-Pox in the Years 1667, 68, and part of 69.

IN those Years the Small-Pox are Epidemical, if they be also regular and gentle, they begin about *March*, as these did, whereas we now treat: But when they do not only spread Epidemically, but are also irregular, and of a more dangerous sort, they break out sometimes earlier, viz. in *January*, infecting whole Families, and sparing none of what Age soever they be, if they have not had this disease already; nor are they excepted that have had a *Bastard Small-Pox* before. There are two sorts of them, as of the *Small-Pox*, that invade in all Years; for either they are distinct, or confluent, which though they differ not essentially

Essentially as they say, yet by some remarkable Symptoms which attend the one, and not the other, it is no hard matter to distinguish them,

The distict begin with Shivering and coldness, which is presently followed by excessive Heat, and a violent Pain in the head and Back, Vomiting a great propensity to sweat, (I mean in grown Persons; for I never yet observed any such Disposition in Children either before or after they came out) a Pain at the Cavity of the Breast beneath the Region of the Heart, if it be pressed with the Hand, dulness and sleepiness, and sometimes Convulsive Fits; and if these happen to those that have all their Teeth, I reckon the *Small-Pox* are at hand, which most commonly coming out a few Hours after, sufficiently answer the Prognostication: For instance; if the Child has a convulsive fit in the Evening, as it usually happens, the *Small-Pox* appear next Morning, and moreover I have often observed, that when they come out immediately after those Fits, they arise in large Pustles, and are mild and favourable, and seldom Flux; and these, for the most part, were the Symptoms which accompanied this Disease at its beginning, and preceded the eruption of the Pustles. But here it is proper to acquaint you, that sometimes it happens so, that in a looser Texture of the Blood, which is easily changed, the course of separation may be passed over gradually, without any violent Sickness before the expulsion of the Matter discover it self by the eruption of the Pustles.

The distict *Small-Pox* usually come out on the fourth Day inclusively, and sometimes a little later, but very rarely before, at which time; for the most part, the Symptoms are very much abated, or quite vanish, and the Patient thinks himself very well, only grown People are so disposed to Sweat, that they can scarce be kept from it, though they have little or no Cloaths on them, which Disposition does not leave them, till the Pustles begin to ripen, and then it vanishes of its own accord. The eruption is, after this manner; first Pimples as big as small Pins heads here and there shew themselves, and first of all in the Face, or Neck and Breast, and afterwards in the whole Body. At this time the Jaws are affected with a pain that encreases as the Pustles rise, which growing daily bigger and higher inflame the Neighbouring Skin and Flesh.

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For about the eighth Day from the first approach of the Sickness, which I always diligently observe in this Disease the spaces between, that before were somewhat white, now begin to be red, and swelled more or less, according to the number of the Pustles, with a tenfive and launcing Pain of those Parts, which encreasing hourly, occasions the Inflammation and Swelling above-mentioned; so that in the Progress of the Distemper, the Eye-lids are so filled up and extended, that the Patient is sometimes deprived of sight, and when they are thus tumified, they shine, and are like a Bladder blown up. And if a greater number of the Pustles besiege the Eyes at the first Eruption, they sooner retire to their dark Mansions. Next after the Face, the Hands and Fingers swell more or less, according to the number of the Pustles; the Pustles that are smooth and red till this Day, are now grown rough and somewhat white, which is indeed their first sign of coming to maturity. Moreover they cast out by degrees a certain yellowish Matter, in colour like an Honey-comb, and the inflammation of the Hands and Face, when it is at height, causes a very florid Colour in the spaces between the *Small-Pox*, not unlike a Damask-Rose; and truly the milder and more genuine the *Small-Pox* are, so much the more do the Pustles, and the Skin between, represent to the Life the Colour before described; and as the Pustles in the Face grow rougher and yellower as they ripen; so on the contrary, those on the Hands and other parts of the Body daily appear smoother.

On the eleventh day, the Tumor and Inflammation of the Face manifestly diminish, and the Pustles of the Face and Body, having arrived at their maturity, and just magnitude, (which in these Years equalled a large Pea) dry away and fall off: And in this sort of *Small-Pox*, most commonly vanish on the fourteenth or fifteenth day; but the Pustles of the Hands are many times more obstinate, for being fresh and white, they stay a day or two behind the other; and whereas those of the Face and Body scale off, these break and run away. Scurfie Scales succeed the Pustles of the Face, and sometimes Pock-holes follow them; for when the Pustles fall off, there is no inequality to be perceived in the Skin: But after the Scales the Pits appear, and are to be seen a long time after the Patient's ell; yet the distinct *Small-Pox* seldom leave any Marks behind

behind, and they were almost all that pitted, which invaded the last six Months of the Year; for those that preceded them made no Impression on the Skin, unless they fluxed, as shall be said hereafter. Through the whole course of this Disease the Patient was either bound altogether, or went to Stool very seldom. And so much for the distinct *Small-Pox*.

That sort of *Small-Pox* which we call the *Flux*, has the same Symptoms with the distinct, only they are more violent, the Sickness, Vomiting, Fever, and the Restlessness, rage more cruelly, by which they are known to a skilful Physician before they come out; only the Sick is not so apt to Sweat in this sort as in the other above described; and where there is a great Inclination to it, it most commonly signifies, that the *Small-Pox* which are coming out will not flux. Moreover a Looseness sometimes precedes the Eruption, and continues a day or two after it, which I never observed in the distinct *Small-Pox*.

This sort comes out generally on the third Day, sometimes before, scarce ever after it; whereas the distinct shew themselves the very fourth day inclusively from the first being taken, or after, very seldom before; and by how much sooner they come out before the fourth day, so much more will they Flux. And though, to speak in general, the *Flux-pox* scarce ever tarries till the fourth day, yet it may so happen, though very rarely, that the Eruption may be deferred to the fourth or fifth, by reason of some grievous Symptom which afflicts the Patient before the Eruption, as a most violent Pain, sometimes in the Region of the Loins, like a Fit of the Stone; sometimes in the Side, like a *Pleurisie*; sometimes in the Limbs, like a *Rheumatism*; lastly, in the Stomach with violent Sickness and Vomiting: In these Cases I have observed the *Small-Pox* to come out later than ordinary, because they were restrained and hindered by the extream Violence of the said Symptoms; which Symptoms being more violent than usually, they are wont to be, when they lead the Van, plainly indicate to me, that the following *Small-Pox* will be of the confluent kind, and not without danger.

But in the next place I must acquaint you, that though in the distinct *Small-Pox*, the Symptoms that accompany the beginning of this Disease cease, as I said before, immediately after the Eruption. It is quite different in the *Flux*, for the Fever and other Symptoms molest the Sick

many days after the coming out of the Pustles. This sort comes forth sometimes like an *Erysipelas*; sometimes like the *Measles*; and as to the outward appearance, they cannot be distinguish'd by any but those that are very conversant in this Disease, at least as to the external appearance; yet he that shall diligently consider the great difference, as to the time of eruption in these Diseases, and other Circumstances, which he may gather from the History of each of them, will easily be able to distinguish them. As the Disease encreases these do not rise so high as the distinct, especially those in the Face; but being entangled one with another, first they represent a red Bladder that covers the whole Face, which they soonertumescence than the distinct are wont to do, and afterwards they are like a white Skin gl'd as it were to the Face; which does not rise much higher than the common Superficies of the Skin. After the eighth Day, the white Skin by degrees grows daily rougher, as appears by touching, and begins to be changed into a dusky colour, not a yellow, as in the other sort, the roughness and colour of the Skin encreases daily, till at length it falls off in large Scales. But if the Disease has been very severe, it does not scale in some places of the Face till after the twentieth day; and the fever of the *Small-Pox* are, so much the more do the Pustles as they ripen incline to a dusky colour, and they are the longer a going away, if they are left to their own Genius; on the contrary, the less they flux, so much the more they wax yellow, and the sooner they go off. When first the scabby Skin that covers the whole Face scales away, it leaves no ruggedness behind; but presently scurvie Scales succeed it, that are indeed very corrosive; for they do not only pit, as the distinct *Small-Pox* used to do, but imprint also filthy Scars on the Face; and if the *Flux-Pox* have been very violent, the Skin of the Shoulders and Back is also sometimes marked, as would appear, if they were naked and exposed to sight.

You must take notice, that this Disease is not to be esteemed dangerous, because the body is full of the *Small-Pox*, but by reason of the number of them in the Face; for if that be very full, though there be few, and those very distinct too, in the rest of the Body, yet the Sick is in as much danger as if every Member was crowded with them; and on the contrary, tho the Trunk and Mem-

bers are very full, if there be but few in the Face, there is less danger. And what has been said of their number, may be likewise affirmed of the kind of them; for the Face plainly indicates whether they are mild or otherwise.

I have always observed, that in the *Flux* the Pustles of the Hands and Feet were larger than those of the Body, and that they were less and less the nearer they approached to the Trunk. And so much for the Pustles.

There are two other Symptoms that attend the *Flux-Pox*, which are as considerable as the Pustles or Swelling, or any other of the forementioned, to wit, Salivation in grown People, and a Looseness in Children: The first of these is so perpetual a Concomitant, that I never knew but one that had the continent kind, and was free from it: But the latter, to wit, the Looseness, does not so certainly vex Children that have this sort. But whether provident Nature has therefore substituted these evacuations, because in this low and small sort the morbidick Matter cannot be so fully discharged, as by the larger and higher Pustles of the distinct, I do not determine; for I only relate a History, and do not pretend to solve Problems. This I certainly know, that they did not only most commonly accompany the continent *Small-Pox*, but evacuation by them is as necessary as either the Pustles or swelling of the Face and Hands. Sometimes Salivation discovers it self at their first coming out, sometimes not till a Day or two after. First the Matter is thin, and easily spit up, so that the sick fouls a great many Cloaths in a Nights time: And truly it is not much unlike a Mercurial Salivation, only it does not stick so much; but most commonly about the eleventh Day it is more clammy, so that it is difficultly hawked up; the Sick is thirsty, and now and then Coughs as he drinks, and the Liquor flies out at his Nostrils; and after this Day Salivation most commonly ceases, tho' sometimes, (but rarely) after it has ceased a Day or two, it returns again, as the Tumour of the Face, together with the Salivation begins to decline on the eleventh Day, so at the same time, instead of it, the Hands are wont to swell, or ought to do so.

A Looseness does not invade Children so soon as Spitting does grown People; but at what time soever it comes, if it be not stop'd by Art, it continues through the whole course of the Disease.

In both kinds of the *Small-Pox*, the *Fever* is highest from the beginning to the eruption, after which it is more moderate, till the Pustles begin to ripen, and afterwards it totally vanishes.

I have always observed, That when the Disease was violent, the Sick had as it were a Fit in the Evening, and then the Symptoms raged more cruelly.

And now I have given you an exact Account of this sort of *Small Pox*, as it is of its own Nature, and of the true and natural *Phænomena* of it. In the next place I will treat of the irregular Symptoms that happen in this Disease when it is unskillfully handled.

It is to be noted therefore, that the irregular Symptoms that occur on the eighth Day in the distinct *Small-Pox*, and those that happen on the eleventh in the *Flux*, always reckoning from the first approach of the Disease, are of great moment, with respect to the Life or Death of the Patient; and therefore they ought to be exactly weighed; for it is manifest, that the greatest part of those that die of either sort, die of the Days above mention'd; for he that hath the distinct *Small-Pox* hopes all is well, if he sweats freely at first (which, as was said before, is common in grown People) for he believes that by this means the Venom of the Disease will be expelled through the pores of the Skin, and therefore thinks it highly reasonable to promote the Sweat, as much as possible he can, by Cordials, and an hot Regimen, and he is encouraged to proceed in this Method, because at first he fancies some relief thereby; and besides it is agreeable to the erroneous Opinion of the By-standers: But at length those Particles being eliminated by Sweat, which should have served to elevate the Pustles, and to swell the Face. On the eighth day the Face, which ought to have been swelled, and inflamed between the Pustles, on the contrary appears flaccid and white, yet the Pustles continue red and elevated, even when the Patient is Dead, and the Sweat, which followed freely to this Day, now ceases of a sudden of its own accord; nor can it be raised again by the hottest Cordials: The Patient is taken light-headed of a sudden, with the Anxiety, violent Sickness and Restlessness; he makes Water often, but a little at a time, and in the space of a few hours takes leave of his Friends, and repairs to his long home. But here we must take notice, that if the *Small-Pox* are few, and if

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be Winter, or if the Patient be aged, or if Bleeding has been used, then this hot Method, whereof we have now discoursed, does not so certainly hinder the Swelling of the Face; nor is it so destractive as when the *Small-Pox* are thick, or when it is Spring or Summer, or the Patient is in the Flower of his Age, and has not been blooded.

But in the *Flux* the Sick is in greater Danger, and most commonly dies on the eleventh Day; for the Salivation which hitherto preserved the Patient, is wont to cease of its own accord at this time; therefore unless the swelling of the Face persists a little longer, and that of the Hands, now manifestly beginning, supplies its Place, the Sick must necessarily die: For it is to be consider'd, that in this sort the Pustles being so very small, not only Salivation, but the Swelling of the Hands and Face is likewise absolutely requisite for the discharge of the morbidick Matter; and if either of them be absent, or recede before their due time, the Patient is presently dying: But it happens too too often in this hot Disease, that the Crasis of the Blood is so weaken'd and broke by an over-hot Regimen, and so highly inflamed, that it is no longer able to eject leisurely the inflammatory Particles (to say nothing at present of those mischiefs that are occasion'd, by Sweats unseasonable forced) so that either the Face or Hands do not swell at all, or the Tumour vanishes with the Salivation; for though the swelling of the Face ought to abate a little on this Day, yet it should not totally disappear till a Day or two after, the Tumor of the Hands in the mean while encreasing, than which, as there is no surer sign of recovery, so the contrary certainly indicates imminent danger: But however it be, the Matter of the Salivation, which was crude and this, and easily hawked up till this Day, is now viscid and tough, so that the sick is in danger of being choaked, and his Drink is like to strangle him, so that it is forced back through his Nostrils with a violent Cough; he is hoarse, and seized with a great dullness, being wholly oppressed by the violence of the Disease, and most commonly dies in such an Agony on the Day I said before.

There are yet other Symptoms that happen at any time of the Disease, and belong as well to distinct *Small-Pox* as the *Flux*.

For instance; A *Phrensie*, sometimes seizes the Sick, by reason of too great an Ebullition of the Blood, and he is so unable to bear the heat, that he endeavours with all his might to free himself from those that confine him to his Bed; and sometimes the same Cause produces a different, or rather contrary Effect, to wit, a *Coma*, so that the Patient scarce ever wakes, unless he be continually stirred up,

And sometimes also in this Disease, in like manner as in the *Plague*, the Texture of the blood being loosened by the violence of the Inflammation, Purple Spots appear among the Pustles, and are most commonly the forerunners of Death. This is most frequent when the constitution of the Air favours most this Epidemical Disease. Sometimes black small Spots, scarce so big as Pins Heads, flat in the middle, shew themselves at the top of the Pustles in divers Places, and as they take their rise from too great heat, so at length by the help, of a temperate Regimen, they acquire a brown, and afterwards by little and little a yellowish colour; which properly belongs to the genuine and regular Small-Pox. And this is very manifest to those that are conversant in this Disease, wherein all the Symptoms are so much the more gentle, by how much the more the Pustles, when they are ripe, represent the foresaid colour; and so on the contrary,

Moreover, the Blood of young People, and of those that are in the Flower of their Age, rages sometimes so violently, and is so mightily inflamed (especially if they have debauched themselves with Wine or other spirituous Liquors) that it breaks out of the Arteries into the Bladder, and so is evacuated by the urinary passages: And indeed there is scarce a worse Symptom than a bloody Urine in the whole Tragedy of this Disease, and sometimes from the same Cause, though seldom, Blood is cast up from the Lungs. But these *Hemorrhages* happen most commonly at the beginning of the Disease, before the Pustles come out; or if they do appear in some Places, yet in most other parts they lie hid thick under the Skin, and are that kind which would flux most; unless this Symptom kill the Patient, and so put an end to the Disease.

Sometimes also there is a total suppression of Urine, especially in young Men at the height or declination of the disorder. There are also other Symptoms, that sometimes arise from a course contrary to those abovementioned, to wit,

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wit, when the Patient has been injur'd by violent Cold, or excessive bleeding without reason, or by being over-purged, the Pustles sometimes flat on a sudden, and a Looseness supervenes, so that the Patient, if he be adult, as we have hinted before, is in great danger, for the various Matter being struck in, Nature is altogether unable to eject it as she ought by the Pores of the Skin. Moreover, the Tumor of the Face and Hands is repelled upon this account, which is as much for the safety of the Patient as the very eruption of the Pustles, unless they are very few; but the Symptoms that proceed from taking Cold very rarely occur; for this Disease being deservedly reckon'd among the hottest, an Error on this Head is much less than on the other.

I ingenuously acknowledge, that by reason of a defect in the Understanding, which is common to me and the rest of Mankind, I know not the Essence of this Disease; but the above-mentioned Symptoms being seriously considered, seem to indicate, that it is an Inflammation in distinct species from other Inflammations of the Blood, and other Humours, in removing whereof it is Nature's business, for two or three of the first Days, to digest and concoct the inflamed Particles, which afterwards being discharged upon the habit of the Body, she still ripens, and at length expels out of her Territories in the form of little Abscesses. Wherefore, that the method of Cure may be built upon some Foundation, we must take notice of two different Seasons in this Disease, the one of separation, the other of expulsion. The first for the most parts passed through with a febrile Ebullition, and is wont to be finished in the first three or four Days, in which time Nature is busied in gathering together the inflamed Particles which moulder the Blood, and in thrusting them out to the fleshy parts.

The Blood by this means is now quieted, and separation being thus finished by the help of the Ebullition of the Blood, exulsion now takes place, which is performed all the rest of the time of the Disease, by means of those little Abscesses in the Flesh; for as they do not differ from the nature of Abscesses, so they run through the same state of Corruption and Maturation, and dry up as others do; all which if they perform right, things go well, for the

chiefest part of the Cure depends on these. And truly this last business requires so much more time than the former of separation, because that was transacted in a thin and fluid body, and, as I may say, in Nature's bosom; whereas the latter is performed in a dense and thick substance, and more remote from the Fountain of Life.

These things being premised, these Indications arise: First, That such an equality be kept in the Ebullition of the Blood, that it may not, by excessive Violence, perform separation too hastily, nor yet by too torpid a motion retard the same, or not perform it sufficiently. Secondly, That the Abscesses or Pustles may be kept up with the greatest care, that as they run over their due times they may at length wholly carry off the matter contained in them, and they themselves may also fade away.

And to speak a few things of the first; We must be solicitously careful, especially at this time, that the Ebullition rise not too high; either by heaping too many Clothes on, or from the Air of the place where the Patient lies, being over-heated by the Fire, or by the use of hot Medicines or Cordials. And we must especially beware of these things, if the Patient be in the Flower of his Age, or has his Blood too much exalted by generous Liquors, or if it be the Spring time, or but the beginning of Summer; for hence it would so fall out, that separation, which ought to be performed leisurely, so as it may more opportunely perform an universal Despumation, would be precipitated, and so either not a sufficient number of Particles would be gathered, or as it may chance to happen, some Particles may be condemned to secretion, which Nature otherwise would not have them undergo, but that being forced beyond her bounds, she creates this mischief to her self; for when they are separated which are not fit for separation, the motion of others that have an inclination to it, is hindered by their mixing together, and so are rendered less fit for expulsion. To me indeed it seems agreeable to Reason, that the longer Nature is in working and perfecting separation, so the Ebullition be not quite torpid, so much more certainly and universally the separation is performed; and upon its being so finished, it is necessary that the success of the following Cure must especially depend, as from the contrary method the event of the business must be quite contrary; for from that hot Regimen

no good comes, as from overhaſt Fruit no advantage, ſeeing it frequently happens that the Patient falls either down-right into a Phrenſie, or, which is worſe, great Sweats ariſe, whereby Particles not fit for ſeparation, nor anſwering the nature of *Pus*, (which very *Pus* notwithstanding is the genuine product of this ſeparation) are e-jected, or the *Small-Pox* being too much forced out, by giving Cordials, and by a hot Regimen run all into one, a foul Spectacle, and one that threatens a ſad Event : And theſe and the like Symptoms are uſually occaſioned by theſe Errors ; whereas I never obſerved any miſchief from the other method. for Nature, left to her ſelf, does her Work in her own time, and ſeparates, and then expels the matter in the right way and manner ; ſo that in the younger ſort, eſpecially in thoſe of a brisk Temper, ſhe needs not our help, being furniſhed with ſtrength ſufficient of her own ; for neither have I ſeen nor heard of any that miſcarried becauſe the *Small-Pox* came not out at firſt ; but too many have periſhed in whom the *Small-Pox* appeared well, but afterwards upon ſtriking in of the Puſtles, have fallen before they were ripe.

And as it is unadviſed and hazardous to advance too high the Ebullition once begun, either by means of an hot Regimen, or by Cordials ; ſo on the contrary, there is no leſs danger in diminiſhing the ſame by Vomits, Purges, Glyſters, or the like, ſeeing by this means the proper ſecretion of the ſeparable Particles is much hindered, tho' that vulgar Argument which Men uſe againſt Bleeding and other Evacuations, *viz.* that we muſt not move the Humors from the circumference to the Center, ſince Nature ſeems to affect the contrary in this Diſeaſe) be of no force at all, becauſe upon uſing theſe means, a quite contrary Effect has often been obſerved to follow, to wit, a ſudden Eruption of the *Small-Pox*. Yet there are other Reaſons in readineſs, which ſtrongly perſwade, that if by any means it may be avoided, we meddle not with this Practice, for (briefly to touch on the chief of them) by theſe Evacuations not only the Ebullition is too much leſſened, by means whereof the Particles to be deſpumated ought accurately to be ſeparated : But that alſo is ſubſtracted, which ſhould continually, as it were, afford Fuel to the Secretion begun ; whence it often happens that the *Small-Pox* coming out at firſt with a laudable Progreſs, and perhaps

perhaps so much the better, because the said Evacuation proceeded, so a little after strike in and flatten of a sudden; and for this reason chiefly, because there wants matter to follow that which went before, and to bring up the Rear. Notwithstanding what has been said, if there be the least suspicion that the *Small-Pox* which are coming out will flux, it will be very advantageous, not only presently to bleed, but also to give a Vomit, for Reasons to be mentioned at large in another place,

As to the second Indication, which concerns the time of expulsion, at which time the separated matter is expelled by the help of the Pustles, we must take care that they be duly kept up, so that they may orderly attain their appointed period.

And as we have sufficiently demonstrated how very dangerous it is for the Patient to be kept over-hot in the time of the secretion, when there is a Fever, and the Pustles scarce yet appear; so also is there no less danger, if the same be done at any time of the Disease, and especially at that time which is towards the beginning of expulsion, while the Pustles are yet crude; for though the Blood be in a great measure free from the intestine Tumult, by reason the separation is finished, and the matter discharged to the fleshy parts, yet it being at present tender and young, and having got scarce Induction into a new State and Texture, it is apt to suffer, and to be easily affected with immoderate heat coming from all parts; and so being irritated, it takes fire upon the least occasion, and is inclinable to a new Ebullition, which does not as the former, endeavour to promote separation, (for we suppose that already finished) but instead thereof, it not only heightens the above-mentioned Symptoms, but disturbs Expulsion begun by the Pustles, and does harm by exagitating the contained matter: Either therefore the Particles now separated and deposited in the habit of the Body, being hurried away by the violent and rapid course of the boiling Blood, are drawn again into its mass, or the fleshy parts being heated beyond the degree due to separation, do not so well perform it: or, lastly, perhaps upon the coming of this new Sickness, the Oeconomy of the Blood and Tone of the Flesh is perverted, so that it cannot overcome the matter expelled, and concoct it after the usual manner of Abscesses.

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But we must not be so intent upon preventing too great an Ebullition in the Blood, as to hinder the Eruption of the Pustles, by exposing the Patient to the Injuries of the cold. The degree of heat most proper to promote their expulsion must be natural, and such as is agreeable to the temper of the carnous parts; and whatsoever exceeds or comes short of this, is dangerous on either Hand.

Now it manifestly appears from what has been said, that this Disease, and also the Method of cure accommodated to it, stands on very slippery Ground; and I dare boldly affirm, that his Reputation will be often questioned, who frequently applies himself to the cure of it; for not only the Vulgar are ready to say, they are physicked to death, but Physicians themselves basely take occasion from hence to calumniate, and easily wheedle the Ignorant into an ill Opinion, that by this means they may gain the more Esteem, and raise themselves by ruining others; which is very much below a Man of Learning, and indeed an honest Mechanick abhors such Practices. Moreover hence we may observe, which is less strange, that over-officious Nurses are most commonly very unsuccessful in this Disease; for it is difficult, and above the reach of ordinary Women, to find out the degree of heat requisite in this case, especially when the Season of the Year, the Age of the Patient, and his manner of living, and the like, are to be weighed at once, which truly require a skilful Physician.

If the Pustles chance to strike in, or the swelling of the Face and Hands fall upon bleeding unseasonably, or catching of cold, we must use Cordials; but we must have a care of being too lavish in giving them; for though you have taken away Blood, yet it may so fall out, that while you are afraid of loss of strength thereby, and use Cordials, either strong ones, or often repeated, you cause new Ebullition on a sudden; for the Blood is yet tender, and easily sensible of the strength of a hot Provocative; whence it comes to pass that often repeated Ebullitions arise in the same, to which the Patient's death may rather be attributed, than to the foregoing Blood-letting. And so much may suffice to be spoken in general of those things, which may satisfy the first Intentions.

Now to come nearer Practice; as soon as the Signs of this Disease show themselves, I keep the sick from the open Air,

Air, and forbid them the use of Wine and Flesh, and allow them Small-beer gently warm'd with a Toast, for their ordinary drink; and now and then I permit them to drink as much of it as they will. I order them for their Vistuals Oatmeal and Barley-broath, and roasted Apples, and other things which are neither too hot nor too cold, nor of too hard a digestion; neither do I much dislike the rustick Diet, to wit, that they are fed with Milk and roasted Apples squeezed into it, provided they use it moderately, and but now and then, and when it is warmed; I forthwith prohibit an hotter Regimen, and the use of all manner of Cordial Medicines, whereby some rashly endeavour to force out the *Small-pox* before the fourth day, which is the natural and proper time for their Eruption; for I certainly know, that the slower they come out, the more vniversal will be the separation of the Pocky matter, and the better will the *Pox* ripen, and the less danger will there be of their striking in; whereas if they are driven out before their due time, the matter being as yet crude and indigested, is precipitated, and deceives our hopes, like over-hasty Fruir: And besides there is great danger, by reason of this over-diligence, especially in florid and hot Constitution, whose active Principles do more than enough supply the room of Cordials-
 lest Nature, being too much incited and forced, should over-run the whole Body with the *Small-pox*, and that by this over-haste they should flux, which otherwise would have been a moderate distinct *Pox*. Moreover, the *Small-pox* must not therefore be immediately forced out as soon as any suspicion of the Disease arises, because, forsooth, the Patient is usually very sick and restless before their coming out, for there cannot so much as one Instance be shewn, that ever any one died, how grievous sick soever he was, because the *Small-Pox* came not presently out, or that Nature was wanting in forcing them out sooner or later, unless at any time she was hinder'd by too hot a Regimen, and Cordials unreasonably prescribed; for I have more than once observed in young People of a sanguine Complexion, that a hot Regimen and Cordials given on purpose to force out the *Small-Pox* before their due time, have so little promoted their coming out, that, on the contrary, they have given a check to it, for the Blood being heated by these means, and put into a more violent motion

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motion than is fit to perform aright the separation of the Pocky matter, only some certain Tokens of the Disease shew themselves, while the Pustles lie within the Skin, and do not raise themselves further by what Cordials soever they are solicited to it, till at length the Blood being reduced to its moderate and due temper, that is, by allowing Small-beer, and taking off part of the load of Cloathes wherewith he was roasted, I have made a convenient way for the Pustles to go out, and so I have put the Patient out of danger, by God's assistance.

Nor have they any more Reason on their side, if I am able to judge, who so obstinately confine the Patient to his Bed, before the fourth day, provided he keeps his Chamber, than they who over-early and unseasonably pour down Cordials; for bloody Urine, purple Spots, and other mortal Symptoms, as abovesaid, come upon People in the Flower of their Age, meerly because they are too soon confined to their Beds: But on the fourth Day I commit the Sick to his Bed, and then if they come not out well, some gentle Cordial may be properly prescribed, at least for once, to drive out the Pustles. Among Medicines for this purpose, those they call *Paregoricks*, such as *Liquid Landanum*, *Diaecordium*, and the like, if they be mixed in a small quantity with some proper Cordial-water, excell the rest; for when these give a Check to the boyling Blood, Nature more seasonably and freely casts out the morifick Matter. But I would not advise that a Cordial should be used before this Day, though there be a Looseness, and that, as it seems, indicates the same: For though, as we mention'd before, a Looseness does sometimes precede the eruption of the *Flux-pox*, which is occasion'd by inflammatory Vapours, or Humours emptied into the Intestines from the mass of Blood, enraged and violently hurried the first Days, yet Nature will be no more wanting in expelling the Vapours of the Pocky matter, which being done, the Looseness stops of its own accord, than she is wont to be in ejecting and casting forth of these Vapours; which, when they are inverted to the Stomach at the beginning of the Disease, provoke Vomiting.

But it is to be noted, that if I am called to a strong young Man, who has besides given occasion to the Disease by excessive drinking of Wine, or any spirituous Liquor
whatever

whatever, I reckon it not sufficient for the restraining the Ebullition of the Blood that he abstain from his Bed and Cordials, unless moreover he be let Blood in the arm. But if this cannot be granted by Reason of the prevailing Prejudice of the Vulgar, yet I think I ought at least to urge bleeding; for when that Inflammation which the heat of the spirituous Liquors impress on the Blood is added to the intense heat that naturally attends this Disease, the Blood so rages, that sometimes by the dist of the Vessels it breaks into the Bladder, or causes purple Spots, and other such Symptoms, as through the whole course of the Disease stand in the Physician's way, and carry the Patient off. And so much for those things which are to be performed before the eruption of the Pustles.

When the Pustles first come out, I then diligently consider whether they be of the distinct or confluent kind; because they differ exceedingly the one from the other, though they agree as to some Symptoms: If therefore from the bigness and paucity of the Pustles, and the slowness of their coming out, and from the vanishing of the Sickness, and other Symptoms which tire the Patient after the eruption of the *Flux-pox*, it appears they are the distinct sort, I take care that the Sick be refreshed with Small-beer, Oatmeal and Barly-gruel, and the like, as above described; and if the *Small-Pox* be but few, and in Summer-time, and that very hot, I see no reason why the Patient should be kept stiled up in Bed, and why he may not rather rise a few hours every day, provided the Inconveniencies of too much Cold or Heat may be prevented, by the place and cloathing; for when the Patient keeps up sometimes from his Bed, the Disease runs its course with less trouble, and in a shorter time, than if he had been continually fastened to it; which not only makes the Sickness more tedious, but encreases the febrile Heat, and when the Blisters rise, causes a painful Inflammation. But if either the cold Season of the Year, or a large Eruption of the Pustles, put the Patient under a necessity of keeping his Bed continually, I take Care that he be not hotter, nor with more Cloaths on him, than when he was in Health, and that he have a Fire kindled only Morning and Evening, unless it be Winter. nor do I require that he should be always fixed to one place, lest he sweat, which I do confidently affirm, as well by Reasons above-mentioned,

as by Experience it self, cannot be promoted without great Danger.

When the Disease is going off, it is proper to give three or four Spoonfuls of Canary Wine hot, or some other temperate Cordial-medicine, because the eruption of the Vapours that proceed from the Matter now turn'd to Pus, is hinder'd by the Fustles, which are at length grown crusty and hard; and there is danger lest the putrid Exhalations return again into the Mass of Blood: And truly now, and not sooner, is the time for Cordials; at the same time also a little hotter and more Cordial-Diet may be allowed; for instance, Sugar-sops, and Oatmeal-Caudle, and the like; nor is there need of any other thing at all that is in the distinct and gentle sort, if the Patient will but suffer himself to be treated moderately in his Method and Diet unless by chance Restlessness, or Watchings, or other Symptoms threatening a Phrensy, should now and then persuade the use of a Purgative. And this is indeed the true Method of curing this sort of Small-Pox, and which will prevail when I am dead, notwithstanding the great prejudices Men have taken against it, by reason of an erroneous Opinion; tho' I do not deny but they that have been treated with a quite contrary Regimen have recovered, yet it must be acknowledg'd (and 'tis truly to be lamented, if we consider, that this distinct kind is no way dangerous in its own nature) nevertheless many die, and many more also would yield to Fate, but that they are saved by the cold Season, wherein the Disease happens, or by Blood-letting, (otherwise unnecessary and useless) lately celebrated, upon which account, if either the obstinacy of Friends, or the diffidence of the Patient hinder the foresaid Regimen, I reckon it safest to let Blood; which indeed though of it self it does hurt, because it disturbs and confounds separation, and moreover subtracts the Sustainance designed to keep up the Fustles and Swelling, yet it makes compensation for the hot Regimen which will follow within a while, and therefore renders this Method, which we should not use but against our Will, not so dangerous and doubtful.

By the way, it appears from what has been said, why so few of the common People die of this Disease, compared with the Rich that are killed by it; which indeed can hardly be ascribed to any other Cause, than that by reason

of their Poverty and Country-way of living, they have not power to hurt themselves by a more accurate and delicate Regimen : But this Disease has destroy'd more of the common People since they knew the use of *Mitbridate*, *Diascordium*, and of the *Decoction of Hartshorn*, and the like, than in Ages more unlearned, but far wiser; for now there is scarce a House wherein there is not a pragmatical Woman, who practises that Art to Man's Destruction, which she never learnt. And so much for the Cure of the distinct *Small-Pox*.

But if the *Small-Pox* flux, the Case is very hazardous for I reckon this sort is no less different from the other than the *Plague* is from this, tho' among the Vulgar, who, take Names and Words for Things, the Cure of both is said to be the same. In this sort of Disease, since it is the product of a greater Inflammation of the Blood, more care must be taken that the Patient be not heated, as we said in the Cure of the former : But tho' this kind in its own Nature requires greater cooling than the other, yet, to promote the Swelling of the Hands and Face, (without which the Patient is lost) and the rising and encrease of Pustles, and because the Patient, by reason of the painful Exulcerations, cannot keep from his Bed, it is expedient that he keep both himself and Hands in it, so he have not too many Cloaths on, and have the liberty of turning his Body to any part of the Bed, as he please, as we mention'd in the distinct kind, especially towards the latter end of the Disease, when the *Fever of Maturation* is at hand, the Patient may not only be deprived of this liberty, but he must be admonished to use it; and he must be turned night and day frequently, that the great heat may be qualified, and sweats may be avoided, by which the gentle Humour is carried off, wherewith the *Small-Pox* should be diluted, that they may grow mild.

Seeing therefore, as we said, Salivation constantly accompanies this sort; and whereas 'tis one of Nature's principal Evacuations, and serves instead of that which ought to have been made by Pustles (for the evacuation by Pustles in this low and depressed sort proceeds not so well as in the other) we must earnestly endeavour to continue it, and to keep it up in its vigour, that it be not stop'd before its time, either by the use of hot Medicines, or by forbidding the Patient to drink freely of Small-beer, or some such Liquor. Now, since Salivation,

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according to Nature, is to begin with the first eruption of them, and to abate on the eleventh Day, but not to give over altogether as yet for a Day or two; If it wholly cease before that Day, the Patient's Case is dangerous; for seeing the swelling of the Face (whereby a little of the morbidick matter is evacuated) ever disappears on that Day, if Salivation also withdraws it self at the same time, the Patient is Pysoned by the Pocky matter, now growing putrid or venomous; and whereas now there is no way left by which it may be evacuated, he is at Death's door, unless perhaps (as sometimes it falls out) the swelling of the Hands, which as it shews it self later than that of the Face, so it goes away more slowly), be of that Moment as to snatch him from the jaws of Death. Salivation, which is here so valuable and so necessary, is very much promoted, if the Patient drinks good store of Small-beer, or some such Liquor, as may neither heat him nor provoke him to sweat.

Besides, that this violent Ebullition of the Blood may be quieted, wherein this sort of *Small-Pox* far exceeds the other; and that Salivation may be kept up, (the necessary Evacuation of this Disease) *Narcoticks* are more proper than any other things whatever, which though upon the account of their incrassating Vertue they may seem to hinder the bringing up of the Phlegm, yet I have long since quitted my self of that Prejudice, and have made use of them in this Disease with excellent success, when the Patient was beyond Pubescency: For whereas the Blood of Infants and Children (who for the most part sleep well enough through the whole course of this Disease) ferments more gently, it less wants such a *Remora*: And moreover, the Looseness which Nature has appointed to be an Evacuation for Children in this sort of Disease, is by the use of them stop'd, to the Patient's damage: But *Paregoricks*, if they be frequently administred to grown People, bring these Advantages with them; first, by procuring Sleep moderately they restrain and prevent the violent Ebullition of the Blood, and consequently hinder a *Phrensie*; secondly, by the use of them the swelling of the Hands and Face, which is very requisite, proceeds the better; thirdly, the swelling, by means of *Narcoticks*, is kept up and protracted to Nature's due term, which conduces much to the Patient's safety, seeing oftentimes the swelling of the Face falls sooner, to the endangering of the Patient; for

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when the heat of the Blood is qualified, the inflamed Particles are opportunely carried to the Hands, and all the Surfaces of the Body, according to the Nature of the Disease; and then Salivation is promoted by them, which though it may be stop'd in some for a few Hours, by vertue of so strong an incrassating Medicine, yet strength being presently encreased by this new Aid, Nature rouses her self, and finishes the Work begun with good success. Nay, I have observed, that Salivation, which usually abates about the eleventh Day, and sometimes sooner, to the Patient's great hazard, has, upon giving *Paregoricks*, more than once been renew'd afresh, and has not ceased before the fourteenth Day, and sometimes after it. I usually give either about fourteen drops of *Liquid Laudanum*, or one Ounce of *Dialcordium* in Cowslip-Water, or some other such distilled Water, which, if they be given to grown Persons after the *Small-Pox* are all come out, every night, till the end of the Disease, I have found by experience, that not only no Inconvenience, but great benefit will accrue to them from thence: but 'tis expedient, as I think, to give *Paregoricks* a little sooner than otherwise is usual; for you may easily observe, that in the worst *Small-Pox* the Fit of heat, as I may call it, usually torments the Patient in the Evening with restlessness and other Symptoms, which, if the *Paregoricks* be taken about six or seven a Clock at Night, may be in some measure prevented.

In the next place, whereas in the *Confluent Small-Pox* a Looseness as certainly follows Children as Salivation does the Adult, Nature always appointing one or the other of these Evacuations to carry off the morbidick matter; so on the one Hand I never check Salivation, nor on the other stop the Looseness, since both are equally absurd: And 'tis to be noted, that the ill-bestow'd pains of several impudent Gossips have murder'd many Thousands of Infants, while they falsely reckon with themselves, that a Looseness is as dangerous in this sort of *Small-Pox* as in the other that is distinct; not knowing that in the distinct a Looseness does hurt, where Evacuation is made by the Pustles, but that here it is Nature's Work, seeking a pass for the Disease, and therefore meddling not with the Looseness, but co-operating with Nature, according to the Precept of the divine Old Man, I proceed as I begin, and advise them to lay the Children sometimes in the Cradle, sometimes to take them

up: and if they be weaned, I order them the same Diet as I did grown persons before. At the end of the Disease, when the Face grows stiff by reason of the crusty Pustles that are hard and dry, I anoint it very often with the Oyl of Sweet Almonds, which mitigates the pain arising from the stiffness, and makes the hot Effluvia exhale the easier.

I do nothing to the Face to keep it from pitting, because Oyls, Liniments, and the like, only make the white Scurf longer a coming off, which falls off, and comes again after the Patient is up, and pretty well, and the foul Scurf succeeds it by degrees; but the Patient needs not much fear, when by reason of a moderate Regimen, the Pustles not having been much exasperated, have contracted no caustick quality.

Now, though this Method (if cautiously and prudently accommodated to particular Circumstances) will prevent the foresaid dangerous Symptoms that are disagreeable to Nature, and will render the Disease very benign and safe, yet I am forced to proceed in another manner with some of those Symptoms I am about to mention, (from what cause soever they arise, before I am called in) that I may be the better able to remove them.

First therefore, in the distinct kind, by reason of an over-hot Regimen and continual Sweats, the Face does not swell on the eighth Day, but is flaccid; and though the Pustles appear thick, yet the Spaces betwixt them are pale: In this case, because I would do my utmost for a more temperate Regimen, and to check the fury of the Blood, I immediately order some *Purgative* to be given, which, indeed, (unless the Brain be heated) by gently causing Sleep, and thereby checking the violent Rage of the Blood, seasonably determines it, together with the Heat, to the Face, as the nature of the Disease requires. But if the Mischief coming from this Cause pressed so far, as that Sweat, which flowed hitherto plentifully, ceases of it self. If the Patient fall into a *Phrensie*, complains of violent sickness, and makes little Water, and often, Death is at hand, and I think he can be relieved by no other means than by giving Narcoticks freely, or by taking away a great quantity of Blood from his Arm, and exposing his Body to the open Air. And indeed, what I have now proposed seems not to be rash and unreasonable, if we consider, how some have been delivered from Death by bleeding

plentifully at the Nose: This, moreover, is to be considered, that in this extream Agony, they are not in danger of Death, because the Pustles go in; (for they are out, and very red when the Patient is at his last Gasps) but because the Face does not swell: Now whatever conduces to temper the Blood, (and I suppose none will deny that Bleeding and moderate Refrigeration has this Virtue) must of necessity do good in promoting the swelling of the Face; as well as the use of Paregoricks, and for the same reason.

I would not have this so understood, as if in every *Frensie* coming upon the *Small-Pox* (seeing no Symptom is more frequent than this) I would advise Bleeding immediately, but in that only which therefore happens because the Face does not Swell, that is in the distinct kind, and where Pustles appear plentiful enough, or when by reason of a very hot Regimen and use of Cordials, the Blood is so fierce, and above measure exalted, that it will not give time till it may be reduced to a due temper by Paregorick Medicines, and other Medicines conducing to the same. When the Case stands thus; the Physician governing himself rather by Conscience than uncertain Fame, ought either to take away Blood, as is said before, or order his Patient to be refreshed with the open Air; to effect which it seems to me sufficient, that the Patient rise a little while from Bed, when he is light-headed, by which means I have saved several from Death. Besides those things I have seen myself, there are many innumerable instances of Men, who by these means have been delivered from the Jaws of Death: For some Franticks, having escaped their Nurses guard, (and Men so afflicted use wonderful shifts) have got out of their Bed, and been exposed to the cold Air in the Night; others by stealth, or snatching, or by entreaty, have got cold Water of their Nurses and drank it, and so by an happy mistake have obtained their Health when despaired of.

I will add only one Observation, which was told me by the Party concerned; which is this; That when he was a young Man, and in the Flower of his Age, he travell'd to *Blissat*, and was seiz'd with the *Small-Pox* there, about the middle of Summer, and a little after with a *Frensie*, and his Nurse having occasion at that time to go into the City, left him in charge with some others, intending to return presently;

presently; but while she tarried some time, he died, as the By-standers thought; and considering both the time of the Year, and the habit of his Body, which was gross and corpulent, that the Body might not stink, they lift it out of the Bed, and laid it naked on the Table, throwing only a Sheet over it: The Nurse at length coming back, and hearing the sad News, enters the Room, to behold the sad Spectacle; she presently threw off the Sheet, and looked on his Face, and thinking she discovered some obscure signs of Life, presently laid him in Bed again, and he recovered in few days.

But to return to the business: In the next place, if in the confluent *Small-Pox* the Spittle be so baked and tough by the preceding heat, that the Patient is almost strangled (which is not unusual, as we said on the eleventh day) a Gargarism must necessarily be used, and order must be given to syringe the Throat with it often, night and day; let it be made either of small-Beer, or Barley-water, with Honey of Roses; or the following may be used.

Take of the Bark of the Elm six Draughts, of the Roots of Liquorish half an Ounce, of Raisins stoned number twenty, of Red Roses two Pugils, boil them in a sufficient quantity of Water to one Pint and an half, strain it, and dissolve in it of Honey of Roses and simple Oxymel, each two Ounces, mingle them, and make a Gargarism.

But if the Patient has been treated as he ought, Salivation, even when it begins to abate, will do its Office so well, that there will be no need of this Remedy: And truly when it comes to this, that the Patient is in danger of being choaked every Moment, quite dyled, and his Breath almost gone, we cannot safely trust to this Remedy. When therefore the Patient is thus at his last Gasps, I have sometimes very seasonably and successfully given a Vomit of the infusion of *Crocus Metallorum*, but in a large Dose, viz. one Ounce and an half, because of the extraordinary stupidity which the Patient labours under; a less Dose will not work at all; and in the mean time by disturbing the Humours which it cannot carry off, will put the Patient in great danger of his Life: Nor can we well depend on this Remedy, and, indeed, (which is much to be lamented)

some other surer Medicine is wanting, that may vanquish this cruel Symptom, which alone destroys almost all that die on the eleventh day of this sort of *Pox*.

And as those Symptoms which happen in this Disease, are prevented by the help of a temperate Regimen; so are almost of them cured by the same. For Instance, as the foremention'd *Feenke* arises from too great an heat of the Brain, so 'tis cured by cooling the Blood any way; and by the same means, a *Coma* is easily remedied, which seems to be a Symptom quite contrary to the other. It takes its rise from an obstruction of the *Cortex* of the Brain, while hot Steams, occasioned by the Blood being attenuated by reason of an hot Regimen, and hot Medicines are forced thither in great quantities: By this tempering of the Blood I have seen Purple Spots removed; but neither by this, nor any other Method, could I ever see either pissing of Blood, or a violent Eruption of it from the Lungs stop'd as yet: But both these *Hæmorrhages*, as far as I have hitherto observed, undoubtedly presage Death.

In a suppression of Urine, which sometimes afflicts the younger and brisker sort (occasion'd by the great confusion and disorder of the Spirits which serve for the voiding of it, by reason the Blood and Humours are disturbed with too great heat) I have taken all the Tribes of Diuretics to my assistance; but nothing succeeded so well with me, as to take the Patient out of his Bed, who being supported by some that were by, when he had walked twice or thrice cross the Room, presently made store of Urine, to his great relief. I could here produce some Physicians of my acquaintance for Witnesses, who by my Advice have order'd the same thing in this Case, and it succeeded well.

But the Symptoms which proceed from the repercussion of the Pocky Matter by extream Cold, or Evacuation unduly made, must be removed by the use of Cordials, and a suitable Regimen, which yet must not be continued beyond the time that the Symptoms continues. The chief of them are a depression or falling of the Pustles, and a Looseness in the distinct *Small-Pox*: for in the *Flux* neither depression of the Pustles forebodes any ill, because 'tis the Nature of the Disease; nor a Looseness in Children that are sick of them, because 'tis in order to Health. In both these Cases a Cordial Potion of some proper distilled Waters,

Waters, with *Discordium*, *liquid Laudanum*, and the like, may very well be given, and that not only to remove the foreſaid Symptoms, but at any time of the Diſeaſe, if the Patient complain of a Pain at his Heart, and of Sickneſs. But to ſpeak the Truth, the Symptoms of this kind are very rare, if they are compared with thoſe that owe their Original to the other extreame, which is more fatal, tho' leſs blamed; and, indeed, I think that the Rumour which has ſo much prevailed concerning the frequent ſtriking in of the Puſtles, chiefly proceeds from a miſtake of thoſe that have obſerved their Depression in the confluent kind; which they took to be a ſtriking in of the variolous Matter by reaſon of taking cold, whereas 'tis nothing elſe but the Nature of the Diſeaſe; and they ſuſpect the ſame in the diſtinct kind, becauſe they expect the eruption and encrease of the Puſtles before their due time, having not ſufficiently taken notice of the time when Nature uſes to bring this Fruit to maturity.

When the Patient is upon recovery, and the Puſtles are falling off, and he has eaten Fleſh a few days, viz. about the one and twentieth day, I reckon he may be bled in the Arm, if the Diſeaſe has been violent; for the inflammation which the *Small-Pox* has impreſſed upon the Blood, whether the Patient be old or young, no leſs indicates Blood-letting than the ſilt which has been gathered together does Purging; which is evident enough both from the colour of the Blood that is taken away after the *Small-Pox* have been ſevere, which is like that of *Pleuriticks*, and alſo from thoſe great Inflammations that fall on the Eyes after this Diſeaſe, as alſo from other ill Effects of the Blood overheated, and depraved by this Diſeaſe; which is the reaſon that they who were very healthy all their Lives before, do all their life-time after conſiſt with ſharp hot Humours falling on the Lungs, or ſome other Part. But if the Puſtles have been but few, there will be no need of Bleeding: After Bleeding I give three or four Purges. Moreover, when the Patient has been freed a while from the *Flux-Pox*, and riſes daily, it ſometimes ſo happens, that he is cruelly troubled with a ſwelling of his Legs, which either goes off of its own accord after Bleeding and Purging, or is eaſily aſſwaged by the uſe of diſcuſſing and emollient Herbs boild in Milk, (ſuch as are Mallows, the Leaves of Mullein, Elder, Lawrel, with the Flowers of

(Camomile and Melilot.) And so much for the History and Cure of the *Small-Pox*, which prevailed for these two Years; and that I may distinguish them from the other kinds which follow, I term them legitimate.

CHAP. III.

Of the Continual Fever of the Years 1667, 68, and part of 69.

NOW, that I may speak of the *Fever* that reigned during this pocky Constitution, and that begun and ended with the *Small-Pox*; it afflicted the Sick in the following manner: He had a Pain in the Region, which is under the *Scrobiculus cordis*, and could not bear the touching of it, which I do not remember I observed in any other Disease besides this *Fever*, and this kind of *Small-Pox*; the pain of the Head, and the Heat of the whole Body, and also the Spots were very manifest; but the Sick was not thirsty, the Tongue was often like the Tongue of a well Person, only it was sometimes whitish, seldom dry, but never Black. The Sick was much disposed to large spontaneous Sweats, from the very beginning of the Disease, but was not relieved thereby; yea, when they were provoked by Hot Medicines and an hot Regimen, there was danger of a *Phrensie*: Moreover, the number of the Spots were encreased, and all other Symptoms were rendred more violent; the separation of the Urine, which seem'd very laudable even from the beginning, promised well, and yet the Patient was not more relieved thereby, than by the Sweat which we mention'd before. If this Disease was ill manag'd, it continued most commonly a long while, and did not go off critically, or of its own accord like other Fevers, but afflicted the Sick with violent Symptoms six or eight Weeks, unless Death had dispatched the business sooner. At the latter end the Sick spit much, if no considerable Evacuation went before, and if the Sick took cooling Juleps, the Disease went off thereby beyond expectation, if it were not stopped by Evacuations, or hot Medicines. And as this *Fever* depended on that Epidemick Constitution

Constitution of Air, which at the same time produced the *Small-Pox*; so indeed if it was not plainly the same, it was almost exactly of the same Nature and Genius, excepting only those Symptoms which were the necessary consequences of the eruption: For both Diseases began in the same manner; there was the same Pain in those parts which are under the *Scrobiculus Cordis*, if the Hand touched them; the colour of the Tongue, the consistence of the Urine, and the like, were the same in both: So were the great spontaneous Sweats that arise at the beginning; and the Disposition of this disease to Salivation when the heat was violent, was the very same as in these *Small-Pox* when they fluxed. Moreover, seeing this *Fever* raged chiefly at that time, when the *Small-Pox* were more Epidemick than I ever knew them at any other time, none can doubt but that they were both of the same Family. This I certainly know, all the practical *Phænomena* which respect the Cure, were plainly the same in both Diseases, excepting those things which the Eruption of the *Small-Pox*, and the Effects of them indicated, which because there was none in this *Fever*, they could not therefore be indicated; which was indeed very clear to me from the Observation I made in those that had both Diseases. Wherefore I must be allowed to call this a variolous *Fever*, upon the account of the likeness it has to this kind of *Small-Pox*, though I as little affect to give things new Names as any one, only I do it to distinguish this *Fever* from the rest.

But how much soever the said *Fever* resembles the *Small-Pox*, no sober Man will be easily perswaded, that it ought to be cured by the same Method; because in these the inflamed Particles, by the help of the Pustles, are cast upon the habit of the Body; but in this *Fever* they are ejected by Spittle: For the Sweats that flowed at the beginning of the Disease were Symptomatical, not Critical, Nature seeming to have designed no other Evacuation in this Disease than Salivation, though she herself most commonly perverts it, either by a Looseness, which most commonly arises from inflammatory rays, conveyed through the Mesenterick Arteries to the Intestines, and solliciting them to Excretion (which is usual in *Pleurisies* and other inflammatory *Fevers*, by reason of the Fury of the Blood, and hot Particles that endeavour to be cooled) or by violent Sweats, which always accompanied this Disease, as well

well as the *Small-Pox*, by Nature's appointment; which being Symptomatical, the Salivation was turned another way, that otherwise would have been Critical; so that unless Art suggested another Evacuation, the Disease continued for some Weeks, and would not come to Concoction like other Fevers.

But to proceed a little further, that we may the better understand the Nature of this *Fever*, and make a good Foundation for the curative Indication, we must take notice, that in the *Fever* which reigned in the Epidemick Constitution for *Agues*, the Matter which was to be separated from the Blood was so thick, that it could not be separated without previous Digestion, so as to be disposed for a due Evacuation at an appointed time, either by a large Transpiration, or by a critical Evacuation by Stool; so that the whole business of the Physician was to accommodate himself to the Genius of the Disease, so that it did not rise too high on the one Hand, and cause dangerous Symptoms, nor on the other Hand sink so low, as not to be able to eject the offensive Matter, a *Fever* being Nature's Instrument to perform this Secretion: And also in the *Plague* there is some Matter that must be separated from the Blood; but it consisting of very fine Parts that are very inflammable (such as sometimes when they are exasperated pass through the Blood like Lightning, and do not cause an Ebullition in it) passes through in the twinkling of an Eye and stops only in some Glandule, or some external Part, where being entangled, it first inflames the Part, and afterwards causes an Imposthume, and an Imposthume is Nature's Machine, whereby she frees the Flesh from such things as are offensive to it; as a *Fever* is her Instrument, whereby she removes that which disorders the Blood, in which case 'tis the Physician's Duty to govern the Evacuation of the pestilent Matter, which Nature attempts by these Abscesses, unless any one should think it more advisable to substitute some other Evacuation, which is more in his Power, and which he can govern better than that of Nature. In the same manner Nature proceeds in expelling the Matter of the *Small-Pox*, which is a grosser sort of Inflammation, that is cast out by Pustles, dispersed every where instead of Carbuncles and Bubo's, and the like: And in this case also the curative Indications are to be so directed, that the natural Evacuation by the Pustles may go on well.

well. But now in this kind of inflammatory *Fever*, of which we now treat, such a gross Matter is not to be found that requires previous Digestion before it be ejected, as in the *Fever* above described; and therefore we endeavour in vain to obtain such a Digestion, by leaving the business to Ebullition. And moreover, on the contrary, there is danger in proceeding this way of heightening the Disease, its Essence consisting of a violent Inflammation. And moreover because Nature has appointed no Evacuation for this *Fever* by Eruptions, which we see in *Pestilential Fevers*, and the *Small-Pox*, though as to other things it agrees with the latter Disease. The sum of all is the quieting the Inflammation by Evacuation and attemperating Medicines; and therefore I proceeded accordingly to the Cure of it in the following manner.

Being called to a Patient, I order'd him presently to be blooded in the Arm, if great weakness, or especially old Age, did not forbid, and that it should be repeated every other Day for twice, unless the signs of recovery should appear. On the Day between, a Glyster of Milk and Sugar, or the like, was injected, and the following Julep, or the like, was used through the whole course of the Disease.

- Take of Waters of Purslain, Lettice, and of Cowslip-flowers, each four Ounces; of Syrup of Lemons one Ounce and an half, of Syrup of Violets, one Ounce; let him take three Ounces four or five times in a Day, or as often as he will.

And I allow'd him Whey, Barley-water, and the like, for his ordinary Drink, and for his Diet Broths of Barley, Oat-meal, Panada, roasted Apples and the like: But I forbid Chicken-broth, and any other kind of Broth of Flesh. Above all I order'd he should not lie continually in Bed, but should keep up good part of the Day, and that daily; for I observe in this *Fever* (as in a *Pleurisie*, *Rheumatism*, and other Inflammatory Diseases, in the Cure whereof bleeding and cooling are the chief Remedies) that the most cooling Medicines, and bleeding often repeated, do no good, when the Patient keeps his Bed continually, and is inflamed by its heat, especially in the Summer; wherefore the Sweat which now and then flowed did not fright me from this cooling Method and Medicines, and from forbidding the
continual

continual keeping in Bed ; for though one might reasonably think, that great benefit may be received from an Indication taken from those things, which generally do good; yet I have found by experience, that the Patient is not only not relieved, but is more heated thereby, so that often a Frensie, and Spots, and other ill Symptoms presently follow those Sweats, which do not seem to proceed so much from Malignity of the Disease as from ill management.

If any one should object, that the Method proposed for curing Fevers is quite contrary to the Theory of Authors, who all with one consent declare, That a Fever is best and most naturally cured by Sweats ; I have this to say for myself (besides the certain and constant Testimony of Experience, which always sides with me in the Cure of this particular Fever) I suppose that learned Men, who insist so earnestly for the provocation of Sweat in the Cure of a Fever, mean those Sweats which are evacuated after the previous digestion of some Humour lodged in the Blood ; in preparing of which Humour Nature has been a certain time busied, that it might be ejected by Sweat : But the case is quite different here ; for the Sick sweats plentifully presently, at the very beginning, and Sweats are a great part of the Disease ; and if we may judge by all the *Phænomena*, this Disease proceeds rather from meer heat of the Blood, than from any humour lurking within, and to be expelled from the Blood after due Concoction by Sweat. But if we should suppose such an Humour, as is ripened by Digestion, is found in this Fever, as in many others, to what purpose is it to assist Nature (whereas 'tis our business to reduce to order her irregular attempts) who is over-officious already, by forcing Sweat, with Cordials and an hot Regimen, seeing the well known Axiom, viz. *Things concocted, not crude, are to be medicated*, respects Sweating as well as Purging.

During this Constitution, I was called to Dr. Morrice, who at that time practis'd in London, and now at Petworth in Sussex ; he had this Fever with violent Sweats, and many Spots, and by the consent of other Physicians, that were his and my Acquaintance, he was blooded, and rose, having first rubbed off the Sweat ; he us'd a cooling Diet, and Medicines, and was presently relieved, the violent Symptoms soon going off ; and persisting in this Method, he recovered in a few Days.

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of the Years 1667, 68, and part of 69. 109

But to return to the business: Nor did the Looseness which often accompanied this Fever, hinder me from proceeding in the Method above-mentioned; yea, I have found (so far as it was occasioned by inflammatory Vapours passing from the Blood through the Mesenterick Arteries into the Intestines, and vellicating them) that nothing was so effectual for stopping this Flux as Bleeding and cooling the Blood with Barly-water, Whey, and the like.

This Method succeeded excellently well in the cure of this Disease, and seemed better than any other, though I know many recovered that were treated a quite contrary way, viz. By Cordials and an hot Regimen: But I always thought they ran great hazards unnecessarily; for the Spots, which otherwise were very few, became by this means very numerous, the thirst, which most commonly was little, was by this way of proceeding mightily encreased, and the Tongue which otherwise was moist, and not much unlike the Tongue of a healthy Person, only, as we said, was a little white, was dry under this Regimen, and often black: Lastly, those very Sweats, which by the use of Cordials they so much laboured to force out, at length were stop'd by the use of them: For too great a quantity of Serum being evacuated through the habit of the Body, the Blood was unable to supply any more of it, and that Moisture being quite wasted wherewith it ought to have been diluted, the Sick grew forthwith dry, and the outward Parts are bound up quite contrary to the course which Nature used to observe in this Fever, till at length the Blood being again replenished from the Moisture received from what is taken in, expels this Serum lately brought in together with the Fever, partly by the help of Medicines, and partly by force of the Fever: But this Crisis was too much forc'd, and too dangerous, and which is yet worse, seldom happened.

But now, as I mentioned above, the solution of this Fever, as also the Small-Pox which is near akin to it, was often made by Salivation, and was always beneficial, and when it flowed plentifully, it took off the Purple Spots and the Fever too: Therefore when the Spitting arises, no Evacuation must be used, neither by Bleeding nor by Glysters; for by the use of either there is danger, lest the Humour should be diverted; but Whey and other cooling things

things will further the Salivation; whereas on the contrary; Cordials, and all hot things thicken the Matter, and so stop Spitting.

In the Year 1668, before this *Fever* was quite extinct, the Looseness became Epidemical, without any manifest Sign of a *Fever*; for now the Constitution inclined to that Dysentery, which prevail'd in the following Year; of which we shall treat in the next Section: Yet notwithstanding I thought this Looseness was the same with the Variolous *Fever* now reigning, only differing in Form, and appearing in another Symptom, and perceiving that shaking and shivering was wont to precede this Looseness, and moreover, that it was occasioned most commonly by the same cause the *Fever* was that raged then, it seemed probable to me, that this *Fever* took its rise from inflammatory Rays inverted upon the Bowels, and provoking them to Expulsion; whereas in the mean while the Mass of Blood, by reason of this Diversion, was freed from Disorders, which otherwise those Rays would have occasioned, and no visible sign of a *Fever* shew'd it self outwardly. Moreover, the Sick could not suffer an hand to press the Parts under the *Scrobiculus Cordis*; which Symptom, as we mentioned before, happen'd in the *Small-Pox*, and in the *Fever* of this Constitution. The same pain also, and tenderness of the Flesh, often stretched it self outwardly to the *Epigastrium*, and sometimes also an Inflammation, which ended in an Imposthume, and kill'd the Patient: All which clearly shew'd, that this Looseness was wholly of the same Nature, and Essence with that *Fever* which then reigned. This my Opinion was confirm'd by the happy event which Bleeding and the use of Medicines, Diet, and a Regimen that were cooling (which we have often said were used in the Cure of the variolous *Fever*) always had in stopping the Looseness, for it yielded readily to this Method; whereas, when it was treated in a contrary manner, either by Rhubarb, or other gentle Catharticks (*viz.* to carry off the sharp Humours which were supposed to irritate the Guts for such an Excretion) or by Astringents, though it was naturally gentle, it became after a deadly Disease, as the Bills of Mortality at that time sufficiently testified. And so much for the Epidemical Diseases that depended on this Constitution.

SECT. IV. CHAP. I.

*Of the Epidemick Constitution of part of the
Year 1669, and of the Year 1670,
1671, 1672, at London.*

AT the beginning of *August* 1669. the *Cholera Morbus*, the *Gripes* without Stools, and the *Bloody Flux*, were very frequent, whereas for ten Years before they seldom happened. But though the *Cholera Morbus* was more Epidemical in that Year than I ever knew it before, yet it did not last much longer than the Month of *August*, or a fortnight in *September*; but the *Gripes* without Stools continued to the end of Autumn, and accompanied the *Bloody-Flux*, and were more universal than that. But upon coming of Winter the *Gripes* without Stools vanished: Nor did they appear again in the following Years, wherein this Constitution flourished; but yet the *Flux* was more universal, whereof I think this was the Cause. *viz.* the Constitution was not yet so perfectly disposed to produce the *Bloody-Flux*, that it could in every one cause all the Symptoms which afflict those that have the *Bloody-Flux*: For in the following Autumn, when the *Gripes* returned, the Disease was accompanied with every Pathognomonick Symptom. Betwixt the dry *Gripes* and the *Bloody-Flux* now mentioned, which was every way very raging, a new Fever did arise that accompanied both Diseases, which did not only seize those that were afflicted with one of the former, but also those that were yet free from both; only sometimes (but that seldom happened) there were some small *Gripes*, sometimes with, sometimes without Stools, which because in some sort it resembled that Fever that frequently accompanied the forementioned Diseases, it is to be distinguished from others by the Name of the *Dysenterick Fever*, especially seeing, as we shall shew by and by, it only differs from the Genius of the *Bloody-Flux*, in that it was not accompanied with those Stools which were continually troublesome in the *Bloody-Flux*, nor with those Effects which necessarily follow this Evacuation. At the approach of Winter

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Winter the *Bloody-Flux* withdrew for a while, but the *Dysenterick Fever* raged more: Then also the *Small-Pox*, but they were gentle, broke out in some places.

But about the beginning of the following Year, viz. in *January*, the *Measles* succeeded; which daily encreasing till the *Vernal Equinox*, visited almost every Family, especially Children. But from that time they decreased by degrees; and vanished in *July*, and were no more seen in any of these Years of this Constitution, saving that the next Year, at the time they broke out the Year before, they here and there appeared a little.

These *Measles* made way for a sort of *Small-Pox* that were hitherto unknown to me; and that I may distinguish them from the rest, I call them the irregular *Small-Pox*, of the *Dysenterick Constitution*, by reason of their irregular and unusual Symptoms, that were very different from the *Small-Pox* of the preceding Constitution; as I shall shew hereafter, when I come to treat of them. These *Small-Pox*, though they were not near so frequent as the *Measles*, seized many, till at the beginning of *July* the *Dysenterick Fevers* prevailed, and were Epidemick: But Autumn approaching, namely in *August*, the *Bloody-Flux* returned, and raged more than in the foregoing Year; but it was quelled by the Cold of Winter, as before and afterwards the *Dysenterick Fever* and the *Small-Pox* raged all the Winter.

About the beginning of *February* of the following Year, certain *Agues* arising, both Diseases seldomer appear'd, and though they were not very Epidemical, yet were they more frequent than I had observed them at any time since that Constitution went off, which, as I noted before, was so inclined to them; and these, according to the custom of *Vernal Agues*, went away soon after the Summer Solstice. At the beginning of *July* the *Dysenterick Fevers* returned again to the station they were in former Years; but the Autumn being near over, the *Dysentery* return'd again a third time, but it continued a less while than in the foregoing Year, wherein it seem'd to come to its height; but when Winter came, it went off as before, and the *Dysenterick Fever* and *Small-Pox* raged all that Season.

But as we have mentioned above, at the beginning of both the preceding Years, some very Epidemical Disease prevailed, viz. the *Measles* at the beginning of the Year 1670, and *Tertian Agues* at the beginning of 1671. so that the

the Small-Pox were over-power'd at the beginning of these Years, and could not spread much : But when they reign'd alone at the beginning of 1672, they were very Epidemical till July, at which time the Dysenterick Fever invaded again, but it soon gave place to the Bloody-Flux, which return'd now in August a fourth time ; but it was not so frequent as in the former Years, nor were the Symptoms so violent. Moreover, the Small-Pox were here and there ; so that it was not easie to know which Disease prevailed ; I indeed suppose that the Constitution of the Air being not so inclinable to produce the Bloody-Flux, gave occasion to the Small-Pox, whereby they were able to keep pace with the Flux, which they could not do in those Years, wherein the Bloody-Flux raged in August more violently. The Winter, as it was wont, stopp'd the Flux, but the Fever and the Small-Pox continued ; and now the Small-Pox, according to their custom, were chief, and raged all the Winter, and also the following Spring ; and at the beginning of Summer they here and there appear'd, but they were much gentler than this kind used to be.

But when I affirm, that one Epidemick Disease expell'd another, I do not mean that the Disease which is expelled does quite vanish, but that it does seldomer appear ; for during this Constitution either Disease was found at that Season which was disagreeable to it : For instance, the Bloody-Flux, though it properly belong to the Autumn, did perchance seize one here and there in the Spring, tho' it was very rare.

We have therefore plainly proved, that through this whole Constitution, at the beginning of July, (which Month is the certain Epoch of Autumnal Fevers, as January is of those in the Spring ;) Dysenterick Fevers raged ; and that at the approach of Autumn the Bloody-Flux succeeded them, which, to speak accurately, is truly Autumnal ; which being stopped by the Winter, the Dysenterick Fever and the Small-pox prevail'd ; but the Small-pox continued all the Winter, the Spring and Summer, till in July they were vanquished by the Dysenterick Fever that raged epidemically. And this was the course of things whilst this Constitution flourished.

'Tis moreover to be observed, that as every Epidemick has its periods in particular Subjects, viz. of encrease, state, and declination, so every general Constitution that favours the

Epidemick Production of this or that Disease, has its Periods according to the time it reigns; for it rages more and more epidemically till it comes to its height, and then it gradually decreases, till at length it quite ceases, and gives place to another Constitution. For, as to the violence of the Symptoms, they are most violent when they first appear, and they grow gentle by degrees; and in the Catastrophe of the Constitution they are as gentle as the Nature of the Disease will permit, which is manifest in the *Bloody-flux* and *Small-pox* of this Constitution, as I shall presently shew. I begin to treat particularly of the Diseases of this Constitution, according to the Order they kept.

CHAP. II.

Of the Cholera Morbus of the Year 1669:

THIS Disease, as we said before, was more Epidemical in the Year 1669. than I ever knew it in any other Year; it comes as certainly at the latter end of Summer, and at the approach of Autumn, as Swallows at the beginning of Spring, and as Cuckows at the heat of the following Season. That Disease which is occasion'd by a Surfeit comes at any time; the Symptoms are indeed alike, and the Cure the same, yet 'tis of another kind. The Disease is easily known, for there are violent Vomittings, and an evacuation of ill Humours with great difficulty and trouble by Stool; there is a violent pain and inflammation of the Belly and Guts, an Heart-burning, Thirst, a quick Pulse, with Heat and Anxiety, and often a small and unequal Pulse, with great Nauseousness, and sometimes a colliquative Sweat, Contractions of the Arms and Legs, Fainting, a coldness of the extrem parts, and such-like Symptoms, which frighten the By-standers, and kill the Patient in twenty-four hours. There is also a dry *Cholera*, from a windy Spirit breaking out from above and below, without Vomiting or Looseness, which I never saw but once, and that was at the beginning of this Autumn, at which time the former kind was very common.

I have found by much Consideration, and by manifold Experienc, that if on the one Hand I should endeavour

to expell these sharp Humours, that are the Fuel of the Disease, by *Catharticks*, I should do just as he that endeavours to quench Fire with Oyl, seeing the Operation of the most gentle Purge would but cause farther disturbance, and raise new Tumls; and on the other Hand, should I restrain the first Effort with Narcotick Medicines, and other Astringents, whilst I hinder'd natural Evacuation, and detained the Humour against Nature, the Sick would undoubtedly be destroyed by an Intestine War, his Enemy being kept in his Bowels. For these reasons therefore I thought I must go in the middle way, that I might partly evacuate and partly dilute the Humour. I found out this Method several years ago, and have long experienced it and have by it many times reduced this Disease to good order.

Boyl a Chicken in about three Gallons of Spring water, so that the Liquor has scarce any relish of the Chick; order the Sick to drink several large Draughts of this a little warm, or for want of it Posset-drink; at the same time a good quantity will serve for several Glysters, to be given successively, until all the Broath is consumed and evacuated upwards and downwards, an Ounce of the Syrups of *Lettice*, *Violets*, *Purslain*, or *Water-Lilly*, may be mixed now and then with the Draughts and Glysters, though the Broath will do very well without such addition; so the Stomach being often loaded with a considerable quantity of the Liquor, and, as I may say, turned, and the Injection of Glysters being repeated, the sharp Humours are either cast out, or their Acrimony being taken off, they are reduced to a due temper, the Filth being ejected by these means, which require three or four hours. Some Anodyne Medicine perfects the Cure; I use the following often.

Take of Consip-water one Ounce, of Aqua Mirabilis two Drams, of Liquid Laudatum 16 Drops; mix them.

Any other Narcotick of the Shops may be used instead of it; and this way of diluting the Humours is much safer and quicker, than that which is commonly taken to stop this dangerous Disease, viz. either by things that evacuate or bind, because the Tumult is made worse by Purges, and all things are put in an hurly-burly thereby, and the other on the contrary keeps the Enemy in the Bowels, and of

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a stranger makes him an inhabitant. To say nothing of the tedious Trouble created to the sick when the Disease is protracted, besides the Danger, whereby at length the ill Humours creep into the mass of blood, and soon kindle a malignant Fever.

But it must be carefully noted, that if the Physician is not called till the Vomiting and Looseness have continued many hours, suppose ten or twelve, and the sick is worn out, so that the extremities are cold; I say, in this case, all other Remedies being omitted, he must immediately fly to *Laudanum*, the sacred Anchor in this Disease, which must not only be given when the Symptoms are urgent, but also after the Vomiting and Looseness go off, and must be repeated Morning and Evening daily, till the sick has recovered his Strength and Health.

Though this Disease is epidemical, as was said before, yet it very seldom lasts longer than *August*, wherein it first began; upon which account I have been induced to consider the excellent contrivance of Nature, for the production of Epidemick Diseases; for though the same Causes wholly remain, so that many should be seized with this Disease, as well in *September* as *August*, by reason of eating too much Fruit, yet we see the same effect does not follow: and he that shall carefully observe the *Phænomena* of a legitimate *Cholera*, whereof we only treat at present, will confess that that Disease which invades at any other time of the Year, though coming upon the same occasion, and accompanied with some of the same Symptoms, is altogether different from this now spoken of, as if there were some secret and peculiar thing in the Air of this peculiar Month, that impresses on the Blood, or on the Ferment of the Stomach, some such specifick alteration as is only for this disease.

C H A P. III.

*Of the Bloody-Flux of part of the Year 1669,
and of the Years 70, 71, 72.*

TH E dry Gripes, as we said before, began to invade at the beginning of *August* 1669, and in process of that Autumn equall'd the *Bloody-Flux* that began with them,
or

or rather exceeded it: Sometimes a *Fever* accompanied them, and sometimes not. The aforesaid *Gripes* were altogether like the *Gripes* of the *Bloody-Flux*, which was as frequent at that time: They were very violent and afflicted the Sick by intervals, but no excrementitious or mucous Stools followed: They accompanied the *Bloody-Flux* through all this Autumn, but did not invade any more epidemically with it in the following Years of this Constitution. But seeing these *dry Gripes* do not much differ, either in their Nature or Method, whereby they were easily appeared, from the *Bloody-Flux*, I shall treat only of it.

I have taken notice, that as this Disease invades now at the beginning of Autumn, so it uses most commonly to do, and that 'tis wont to cease a while at the approach of Winter: But when a Series of Years too much favour an Epidemick Production of it, it may seize at any other time here and there one; yea, at the beginning of Spring, and perhaps earlier (if hot weather follows presently after a hard Frost suddenly thawed) it may afflict a pretty many. But tho' very few may be seized with this Disease, yet seeing it comes at an unusual time, I am very well satisfied that that Constitution does not a little favour this Disease; and so it was in those Years wherein the *Bloody-Flux* was so epidemical, for sometimes about Winter, or at the beginning of Spring, as was said, this Disease did seize here and there one.

Sometimes it begins with shaking and shivering, and an heat of the whole Body follows, as is usual in *Fevers*, and soon after the *Gripes* and Stools; but oftentimes there is no appearance of a *Fever* going before, for the *Gripes* begin, and Stools soon follow; but there is always great Tortures and a depression of the Bowels, and pain when the Sick goes to Stool; the Stools are likewise frequent, with a very troublesome descent, as it were, of the Guts; and they are all mucous, not excrementitious, excepting that sometimes an excrementitious Stool comes between, and that is without any great pain. These mucous Stools are streaked with Blood; yet sometimes there is no Blood at all mixed with them through the whole course of the Disease; yet notwithstanding, if the Stools are frequent with *Gripes*, and a mucous filth, the Disease may as properly be called a *Dysentery*, as if Blood flowed out with them.

Moreover, the Sick, if he is in the Flower of his Age, or has been heated by Cordials, has a *Fever*, and his Tongue is cover'd thick with a kind of whitish Mucilage; and if he has been much heated, it is black and dry, the strength is much dejected, the Spirits are dissipated, and all the signs of an ill-savour'd *Fever* are present: And this Disease does not only cause violent Pains and Sickness, but unless it is skilfully treated, it endangers the Patient's Life before the periods of acute Diseases; for when a great many of the Spirits, and a great deal of the vital heat have been exhausted, by these frequent Stools, before the peccant matter can be cast out of the Blood, his Hands and Feet growing cold, he will be in danger of dying; and if he should escape Death at this time, yet many Symptoms of a different kind attend the poor Man: For instance, sometimes in the progress of the Disease, instead of those sanguineous Filaments which at the beginning were wont to be mixed with the Stools, pure Blood, unmixed with Slime, is evacuated in a larger quantity at every time, which is a sign that some of the greater Vessels of the Intestines are corroded, and so the Patient is in danger of Death; and sometimes also by reason of the great burning, which is caused by a large Flux of hot and sharp Humours to the parts affected, the Intestines are gangren'd. Moreover, a *Thrush* at the end of this Disease does very often affect the Mouth and Jaws, especially when the Body has been a long time heated, and when the evacuation of the peccant matter has been hinder'd by astringent Medicines, the Fomes of the Disease having not been first purged off; and this generally is the forerunner of imminent Death. But if the Patient get over the foresaid Symptoms, and the Disease continues long, at length the Guts seem to be affected successively downwards, till all the Disease is thrust down to the right Gut, and ends in a *Tenesmus*; and then, quite otherwise than in the *Bloody-Flux*, the excrementitious Stools cause great pain in the Bowels, the Excrements as they pass through scraping the small Guts; whereas the mucous Stools at the same time molest the right Gut, wherein alone the Matter is made, and from whence 'tis ejected. But though this Disease is very often deadly in the Adult, and especially to old People, yet 'tis very gentle in Children, who sometimes have it some Months without any Injury, if it be left to Nature.

What

What likeness there is betwixt the *Flux* now described, and the National *Bloody-flux* in *Ireland*, I know not, for as yet I have had no account of it; and I cannot tell how like this *Dysentery* is to others that come in other Years in *England*, for perhaps there are various Species of *Dysenteries*, as there are of *Small-Pox*, and other *Epidemicks*, proper to divers Constitutions, and which may in some things require a different method of cure: Nor is there any reason why we should wonder much at this *Lusus Naturæ* in this case; for all confess, that the nearer we pry into any of the Works of Nature, the more manifestly appears the wonderful Variety, and almost divine Artifice of its Works, which is far surpassing our Understanding: So that whoever he be that has taken upon him to search into these things, and to hunt after the various Operations of Nature, he will be partly deceiv'd in his great Undertaking, and will not be able to accomplish his Design; and besides, he must expect to be reproached for his best Inventions, and only because he was the first Inventer.

Moreover, 'tis to be observed, That all *Epidemick Diseases*, at the beginning, seem by their *Phænomena*, to be more spirituous and subtil than when they grow older, and that the more they decline, they become daily more gross and humoral; for whatever those Particles are, which being thoroughly mixed with the Air, we suppose, occasion *Epidemick Constitutions*, 'tis very reasonable to think they should act more powerfully at their first breaking out than afterwards, when their Force is weakned; so in the first Months the *Plague* raged, almost every day, they that were seized with it died suddenly, as they were walking the Streets, without any manner of Sicknesh before; whereas when it had continued a while, no one died of it before he had a *Fever*, and other Symptoms: From whence it plainly appears, that this Disease was most violent and acute at the beginning, though then it killed fewest, for afterwards it became more universal. And also in the *Dysentery*, whereof we now treat, all the Symptoms were at first most violent; though if you reckon the number of the Sick, the Disease daily encreased, till at length it came to its heighth, and consequently more died than at the beginning; yet the Symptoms were more violent at the beginning than at the declination; and, all things consider'd, more for the number of the Sick died. Moreover, the longer the Disease

continued; the more humoral it seemed to be: For instance, the first Autumn it invaded, very many had no Stools at all; but as to the violence of the *Gripes*, the height of the *Fever*, the sudden prostration of Strength, and other Symptoms, it far surpassed the *Bloody-flux* of the following Years; yea, the *Bloody-flux* with Stooles, which first invaded, seemed to be more spirituous and subtle than those that followed; for in the first *Dysenteries* the provocation and straining was greater and more frequent, but the Stools, especially the excrementitious, were less, and not so frequent; but generally as the Disease proceeded, so the *Gripes* were lessened, and the Stools were more excrementitious; and at length the Epidemick Constitution fading, the *Gripes* were scarce perceptible, and the excrementitious Stools were more than the slimy.

Now, at length, to come to the curative Indications, when I had well weighed the various Symptoms that come in this Disease, I found it was a *Fever* of its own kind cast inwardly upon the Guts, whereby the hot and sharp Humours contain'd in the mass of Blood, and exagitating it, are put off, by the meseraick Arteries, upon the said parts, from whence the Blood flows out by Stools, the Orifices of the Vessels being opened by the Blood and Humours flowing impetuously thither, and by reason of the continual endeavours of the Intestines to expel the sharp Humours which continually molest them, that Slime which naturally covers them is cast out by every Stool, sometimes in a greater, sometimes in a lesser quantity; and so the Indications offer themselves plainly: neither have I thought there is any thing else for me to do, than that I should first immediately cause a Revulsion of those sharp Humours by bleeding, and afterwards attemperate the other Mass, and also evacuate the said Humours by Burges. I used this method when I was first called; I bled in the Arm, and at night I gave an Anodyne, and the next morning this Lentitive purging Potion, which I frequently use.

Take of Tamarinds half an Ounce, of the Leaves of Sena two Drams, of Rhubarb one Dram and an half; infuse them in a sufficient quantity of Water; to three Ounces of the strained Liquor add of Manna and Syrup of Roses Solutive, each one Ounce; and make a Potion, to be taken early in the Morning.

I prefer this Potion before any Electuary made of Rhubarb in a small quantity; for though the Rhubarb is proper to evacuate Choler, and any sharp Humour, yet unless such a quantity of Manna, or of Syrup of Roses, or the like, be mixed with it, as may cause it to work well, it does not much conduce to the Cure of the *Bloody-flux*. And because 'tis very obvious that purging Medicines, tho' they be never so gently, do heighten the *Gripes*, and cause a general disorder and depression of the Spirits, by the adventitious tumult they raise in the Blood and Humours; therefore I commonly give an Anodyne somewhat earlier than is customary after purging, viz. at any time of the Afternoon, if the Purge seem to have done working, whereby I may be able to appease the tumult I have raised. I repeat the said Purge to be taken twice every other day, and give an Anodyne after every Purge, at that time above-mentioned; and I order this to be used Morning and Evening, when the Patient does not purge, that I may suppress the violence of the Symptoms, and gain a Truce, while I am evacuating the peccant Humour. The Anodyne I used was chiefly *Liquid Laudanum*, viz. sixteen or eighteen drops in any Cordial-water, for one Dose. After bleeding and purging once used, I allow through the whole course of the Disease, any temperate Cordial to be taken now and then, as Epidemick Water, and Compound Scordium Water, and the like. For instance:

Take of the Waters of Black-Cherries, and Strawberries, each three Ounces, of Epidemick-water, of compound Scordium-Water, and of Cinnamon-water: boyled, each one Ounce, of prepared Pearl one Dram and a half, of Christaline Sugar a sufficient quantity; add half a Dram of Damask-Rose-water to make it pleasant to the Taste; mix them, and make a Julep, whereof, let him take four or five Spoonfuls when he is faint, and at pleasure.

I chiefly used these things in old and Plegmatick People, that I might somewhat refresh and comfort their Spirits, commonly dejected in this Case. Their Drink was Milk mix'd with three times as much Water, or the white decoction, as they call it, of calcin'd Harts-horn, and of Crumbs of White-bread, each two Ounces, boiled in

In three Pints of Fountain-water to two, and afterwards sweeten'd with a sufficient quantity of white Sugar, and sometimes Posset-drink; and when they were very weak, they took for their ordinary Drink cold a Quart of Fountain-water boyled with half a Pint of Sack; they were dieted sometimes with Panado, and sometimes with Broths made of lean Mutton. I kept old People much in Bed, and permitted them to use more freely any Cordial Water they had been accustomed to, than was fit for Infants and young People. This Method was the best I have hitherto met with for the Cure of this Disease, which rarely lasted after the third Purge.

But if the Disease was obstinate, and did not yield to these things, I prescribed the fore-mentioned Paregorick every day in the Morning and at Bed-time, till the Sick was quite well; and that it might be the more certainly quell'd, I gave the foresaid *Laudanum* every eighth hour, that is, thrice in the space of a natural Day, and a larger Dose than I have mention'd above, viz. twenty five Drops if the former Dose could not restrain the Flux. Moreover, I order'd a Glyster made of half a Pint of Cows Milk, and of an Ounce and half of *Venice-Treacle* to be injected every Day, which is truly very beneficial in all manner of Fluxes of the Belly; and indeed I never perceived the least injury from so frequent a repetition of the Norcotick Medicine; tho' unexperienc'd People may say what they please of the Mischiefs that are to follow; for I have known many that have daily used it when the Disease has been obstinate for some Weeks together. But it is here to be noted, that when there is only a Looseness, 'twill be sufficient that (Bleeding and Purging being omitted) *Rhubarb* is given alone every Morning, viz. half a Dram of the Powder of it, more or less, according to the strength of the Sick, made into a Bolus, with a sufficient quantity of *Diafoidium*; add to it two Drops of Chymical Oyl of Cinnamon; the night following give an Anodyne, with an Ounce of Cinnamon-water hordeated, and fourteen Drops of *Niquid Laudanum*, and observe such a Diet as we have described above in the cure of the *Bloody-Flux*; and every day, if there is occasion, give the Glyster commended there. But this by the bye.

Now

Now, to confirm the usefulness of the Method I have propos'd by one Example, for I will not unnecessarily trouble the Reader with many: The Learned and Pious Mr. Thomas Belke Chaplain to the Earl of St. Albans, labouring with a very acute *Dysentery*, sent for me, and was cured with this Method.

Infants afflicted with this Disease are to be treated after the same manner; but the quantity of Blood to be taken away, and the Doses of the Purge, and Anodyne Medicines are to be lessen'd, with respect to their Age. For Instance; Two drops of the Narcotick may be sufficient for a Child of a Year old.

The liquid *Laudanum* which, as I said, I used daily, was prepared according to the following plain manner.

Take of Spanish Wine one Pint, of Opium two Ounces, of Saffron one Ounce, of the Powder of Cinnamon and Cloves, each one Dram; let them be infused together in a Bath two or three Days, till the Liquor comes to a due consistence; strain it, and keep it for use.

I do not think this Preparation has more Vertue than the solid *Laudanum* of the Shops; but I prefer it before that for its more commodious Form, and by reason of the greater certainty of the Dose, for it may be drop'd into Wine, or into any distilled Water, or into any other Liquor. And truly I cannot here forbear mentioning, with Gratitude, that Omnipotent GOD, the Giver of all good Things, has not provided any other Remedy for the Relief of wretched Man, which is so able either to quell more Diseases, or more effectually to extirpate them, than Opiate Medicines taken from some Species of Poppies. And though there are some that would fain persuade some credulous People, that almost all the Vertues of Opiate Medicines, especially of Opium, principally depend on their artificial Preparation of it; yet he that shall make Experience the Judge, and shall as often try the simple Juice, as it comes by Nature, as the Preparations of it, if he be careful in his Observation, he will scarce find any difference, and he will certainly know, that those admirable Effects which it produces proceed from the native Goodness and Excellency of the Plant, and not from the Skill of the Artificer. And so necessary is this instrument in the Hand of a Skillful Man, that without it Physick would

be

be very lame and imperfect; and he that rightly understands it, will do greater things, than can well be hop'd for from one Medicine: For surely he is very unskilful, and little understands the Vertue of this Medicine, who only knows how to use it to promote Sleep, to ease Pain, and to stop a Looseness; whereas it may be accommodated, like the *Delphick* Sword, to many other uses; and it is really a most excellent Cordial Remedy, I had almost said the only one, which has been hitherto found amongst the things of Nature.

The *Bloody-Flux* was to be treated in general after this manner. But it must be noted, that in the first Year it began, it was, as we said, of a more subtle and spirituous Nature than that that raged in the following Years, and therefore it did not so readily yield to purging Medicines, as to those which did as well dilute and temperate the Blood, as the sharp Humours which were put off on the Bowels; therefore in the first Autumn, when the dry Gripes and *Bloody-Flux* invaded, I always used the following Method for the Cure of both, with very good Success, till the weather grew cold, and then I found 'twas not so effectual though in the same Year; and it was wholly useless in the following Years, when the Disease was more humoral.

I proceeded in the following manner: If the Sick, being in the Flower of his Age, had a Fever, I order'd him to be bled in the Arm, and after an hour or two, that he should take great quantities of Liquor, as I was wont to do in the *Cholera Morbus*; but not Chicken-broth or Posset-drink, as in that case, but Whey, which I order'd to be drank cold in the same quantity, as in the *Cholera*: But the Glysters were to be injected warm, without Sugar or any other thing. I found the Gripes and the bloody Stools went off with the fourth Glyster; this business being done, and all the Whey ejected (which might be done in the space of two or three hours, if the Sick minded his business) I presently order'd him to go to Bed, where he soon sweat of his own accord, (by reason of the Whey mixed with the Blood) and I order'd it should be continu'd twenty four Hours, but not at all provoked, allowing him nothing all the while but raw Milk a little warmed; which he only used three or four Days after he left his Bed. If either by rising too soon, or by leaving off the use of Milk too soon, the Patient relapses, the same Method must be repeated;

and if this Method is certain and quick, it ought not to be despised by a wise Man, though 'tis not accompanied with a pompous Apparatus of Remedies.

That a Fever accompanied with such Symptoms, as we have described above, is found in those Places and times wherein the *Bloody-Flux* reigns Epidemically, and the Method which we have proposed is very proper; for it is fully confirmed by the Testimony of Dr. Butler, who accompanied the Honourable Mr. Howard, Ambassador from the King of Great Britain to Africa; in which Country, as he told me, he observed at that time a *Bloody-Flux* raged Epidemically, as it did always, and that the Fever which accompanied it was like that which we have described, which he treated always with Success with the fore-said Method, whether the Sick were *Blackmoors*, or our own Countrymen: And indeed neither of us borrowed this Method of the other, but both of us being at so great a distance fell accidentally upon the same; and moreover he declared, that the Method of dissenting in the *Bloody-Flux* succeeded excellently there; and I think it is very reasonable that this Method should be much more successful in that hot Climate than in England.

In the first Autumn this Constitution flourished, Dr. Daniel Cox, being afflicted with a very acute *Dysentery*, advised with me, and was cured quickly, safely, and easily, by the Method above-mentioned, viz. after the third or fourth Glyster, the *Gripes* and *Bloody Stools* vanished; neither was any thing else, besides keeping his Bed for the time above-mentioned, and the Milk-diet, requisite for the recovery of his Health; and he cured many others afflicted with this Disease by the same Method, at the latter end of the Autumn, but it did not answer his Expectation the Year following.

I said before, that oftentimes this Disease, if it continue long, affects all the Intestines gradually downward, till at length it quite falls to the right Gut, with a continual Inclination of going to Stool, whereby nothing is Evacuated but somewhat slimy and bloodish; if this happen, it will be in vain, in my opinion, to endeavour to remedy it, either by any Method mention'd before, or by cleansing, astringent, and glutinating Glysters, which are wont to be injected according to the various Seasons of this supposed Ulcer, or by Baths, Fomentations, Sulfumigation, and

and Suppositories respecting the same; for it is manifest, that this does not proceed from an Ulcer of the right Gut, but rather because as the Guts gather strength gradually, so they put off the Relicks of the morbidick Matter upon it; which being continually provoked, press out that slimy Matter, whereby the Guts are naturally covered; therefore the part affected is to be strengthened, that it may be able, as the other Guts have done, to eject the small Relicks of the Disease; but those things alone will do this, which are proper to strengthen the Body in general; for antipick Medicine, whatever it be, applied to the Part affected, it being troublefom, will rather weaken than strengthen it, therefore the Patient must bear it till his strength is recovered by some restorative diet, and some Cordial Liquor, that best pleases him, drank as often as he will, and then this Symptom of a *Tenesmus* will go off gradually of its own accord, as the strength returns.

It happens also sometimes, though very rarely, that the *Bloody-Flux*, not rightly cured at the beginning, afflicts a particular Person for some Years, the whole Mass of Blood being of a *Dysenterick* Disposition, so that sharp and hot Humours continually flow to the Bowels; yet in the mean while the Sick can perform his business tolerably well. I met with a Specimen of this not long ago in a Woman my Neighbour, who was always afflicted with this Disease the last three Years of this Constitution, she having used very many Medicines before she came to me; I order'd Bleeding, and I was encouraged to repeat it often, though at a good distance, by the Colour of the Blood, which was like that of *Fluviticks*; and by the great relief she received every time she bled, at length she recover'd.

Before I conclude, 'tis to be noted, that though in these Years wherein Dysenteries have been so Epidemical, the foresaid Evacuations were wholly necessary before we used *Laudanum*, yet in any Constitution not favouring so much this Disease, they may safely be omitted, and the Cure may be performed more compendiously by *Laudanum* alone, according to the manner we have described. And so much for the *Bloody-Flux*.

C H A P. IV.

*Of the Continual Fever of part of the Year 1669,
70, 71, 72.*

AT the same time when the *Bloody flux* raged, a *Fever*, like that which was often wont to accompany the *Bloody-flux*, arose, which did not only seize those that had the *Bloody-flux*, but also those that were wholly free from it; only sometimes, tho' seldom, the Sick was griped, but not violently; sometimes with Stools, sometimes without; it also had always the same manifest and apparent Causes as the *Bloody-Flux* had: The Symptoms were also the same with those that accompanied the *Fever* of such as had the *Bloody-Flux*; so that if you except the Evacuati- ons by Stool, and the Symptoms that necessarily depended on them, the said *Fever* seemed to be of the same Nature with the *Bloody-flux*; and moreover, through the whole course of this Constitution, it had the same alteration of Symptoms in the encrease, state, and declination, as generally the *Bloody-Flux* had, and therefore I called this a *Dysenterick Fever*.

This *Fever* sometimes, as was said, began with *Gripes*, but they were gentle (especially in the first Years it invaded) or they came afterwards, but most commonly there were none; the Sweats which, as we noted formerly, were very large in the *Fever* of the foregoing Constitution, were rare and small in this, but the pain of the Head was more violent in this, than in that *Fever*; The Tongue of the Sick, though it was moist and white, as in the other *Fever*, yet it was covered with a thick Skin: This seldom went off by Spitting, as the other commonly did; but it was more disposed to cause a *Thrush* when it was going off, than either the former, or any other kind of *Fever* I hitherto knew; for it was very common for this (as also for that *Fever* that came upon the *Bloody-Flux*) when it was going away, to put off filthy and acid Matter, upon the Mouth and Throat, by which means the said Symptom was occasioned, especially in those that had been much wasted in this Disease,
when

when it was obstinate, and when too hot a Regimen had weaken'd them more. And upon the same account the Thrush was occasioned, which happen'd every Day in long Dysenteries, accompanied with a Fever, especially if besides a hot Regimen the Evacuation by Stool was stop'd by astringent Medicines, before the Fomes of the Disease was carried off by Bleeding and Purging.

These were the certain Signs of judging of this Fever; the other Symptoms varied yearly, and according to the manifest Qualities of the Air at some certain times, and generally according to the Progress of the Bloody-Flux, and the various Seasons of it. But that these things may appear more clear, because by this Artifice especially Nature Triumphs in the Production of Epidemics, I will treat more particularly of this Matter. 'Tis therefore, to be noted, that though the manifest Qualities of the Air cannot force any Constitution, so as to be the Productive Causes of Epidemical Diseases, that properly belong to it (for they flow from an hidden and inexplicable disposition of it) but for a time they have power over them, and so Epidemics are admitted or excluded, as the manifest Qualities favour or oppose them. But the universal Constitution remains the same, whether they promote, or in some sort retard it. Upon which account it is, that when several Epidemics happen in one Constitution, this or that particular Disease appears chiefly in that Season, to which the sensible Qualities of the Air have assigned it, and at length gives place to another Epidemick, which the different Qualities of the Subsequent season calls in; by which means it comes to pass, that the Stationary Fever, whatever it be, that belongs to the Epidemick of that Year, chiefly rages in July, at the beginning whereof it seizes a great many People together: But at the approach of Autumn it gives way to the great Epidemick then prevailing, which denominates the Year, and is less troublesome, as every Year plainly shews: For Mens Bodies being heated by the foregoing Summer, the Fevers which are proper to the general Constitution easily invade at that time; but at the coming of Autumn, the prevailing Epidemick resumes the Government, and they quite recede.

But as the foresaid Fevers take their rise in this Month from the sensible Qualities of the Air, so also the various Symptoms that are quite contrary to their own Nature, as they

they depend on such a general Constitution, are borrow'd from the manifest Qualities which happen in this Month: And upon this account it is, that in those Years wherein the said Fevers seize a great many, they are accompanied with various new Symptoms, besides those which are proper to them, as they proceed from such a general Constitution yet they continue the same; tho' the Vulgar, by reason of the diversity of the *Phænomena*, reckon there is a new Fever every Year. But these peculiar Symptoms continue only a few Weeks, and the rest of the Year only the proper Symptoms are seen, which happen to them as they are Stationary Fevers of such a Constitution.

This was manifest in other Fevers, but especially in the Dysenterick Fever of July 71, and 72; in the former whereof, violent Sicknefs, green Choler, with a great Inclination to a Looseness, were continually observed at the end of the Disease; in the latter, Pains in the muscular parts of the Body, especially in the Limbs like a *Rheumatism*. Moreover, an Inflammation of the Jaws, but gentler than in a *Quinsie*: yet both these met in the same *specifick Fever*, and both required the same Method of Cure; they differ'd only with respect to the sensible Qualities that were at those times they happened in. But the Eruption of these Fevers was unforeseen and sudden, about the beginning of these Months, and there was a new Face of peculiar Symptoms for some time (tho' they did not differ in Specie, nor in the Method of Cure, which they required from that Fever that run through the whole Year;) these things, I say, sufficiently testify how difficult it is to distinguish at all times the certain Species of a Fever, from the *Phænomena*: But he may well enough know it that shall carefully mind other Diseases that come in the same Year, and also the proper Symptoms of the Fever, which respect this or that manner of Evacuation, and the consideration of the Method or Medicine, whereby it may be easily cured, conduces much to the knowledge of the species of the Fever.

As to the other differences of the Symptoms that accompany *stationary Fevers*, they only respect the various Seasons of the Constitution, and so they are either intense or remis, as the Symptoms of other Epidemics to which they belong are heightened or depressed. But to return to the business, this Fever which, as we said, began

with the *Bloody-flux*, kept pace with it, only it withdrew a little whilst other Epidemics of these Years prevail'd; yet it continu'd and seized sometimes more, sometimes Fewer, during this Constitution.

As to the Cure of this *Fever*, when I had observed, as was said before, that the *Phænomena* of the *Fever* of very many of those that had the *Bloody-flux*, were plainly the same with those which accompanied the *Solitary Fevers* of this Year; I thought it reasonable to attempt the Cure by imitating in some sort that Evacuation, whereby Nature was wont to expel that sharp and corrosive Matter, which was the containing Cause of the *Bloody-flux*, and of the *Fever* that came on it; and therefore I proceeded in this *Fever* with the same Method, both as to Bleeding and Purging repeated, and Cordials, as I have mentioned above more at large; only I found that Purgatives used betwixt the Purges did not only not do good, but were injurious, otherwise than in the *Flux*; for by these the Matter was detained which ought to have been expell'd by Purging. On the first days the Sick fed on Barley and Oat-meal-broths, Panado, and the like; his Drink was Small-beer a little warmed, but after Purging once or twice, there was no necessity for keeping the Sick from eating Chickens, and other Meats of easie digestion: For this way of Cure by Purging made room for those things which could not be allow'd, if we proceeded in another way; the third Purge most commonly, a day being betwixt each, cured the Disease, but not always; for sometimes more were to be used. If after the *Fever* the Sick was weak and recovered slowly (which was very common in hysterick Women) I endeavour'd to restore and recall the deserting Spirits to their Stations they had forsook, by giving *Laudanum* in a small Dose: But I seldom repeated this Remedy, and never prescribed it till two or three Days were passed after the last Purge. But nothing did so much conduce towards the refreshing the Spirits, and recovering the Strength, as the free use of the Air, presently after the *Fever* went off.

I had an opportunity of instituting this Practice almost at the beginning of this Constitution; for being then very thoughtful about the Nature of this *Fever*, I was call'd to a young Woman, my Neighbour, that had the *Fever*, and a violent Pain in the fore-part of her Head, and other
Symptoms

Symptoms, which, as we said, accompanied the *Dysenterick Fever*. When I enquired of her in what manner the Fever invaded, and how long she had had it; she told me, That a Fortnight before she had the *Bloody-flux*, which was then very frequent, and that as soon as that went off either of its own accord, or by the use of Medicines, this Fever succeeded with the Pain of the Head, and I guessed it would be proper for both to substitute another Evacuation like it, instead of the *Flux*; which being stopped, the Fever arose; and therefore I order'd the same by the Method above-mentioned, and the Fevers of this Constitution yielded readily to it; for I always thought it was not sufficient in Acute Diseases, to prove the way of Cure to be true, because it succeeded well (for some are cured by the rashness of the most unskilful Women) but that it was necessary that the Disease should be easily conquer'd, and go off, as it were, according to its own Genius, as much as the Nature of it will allow: But this by the bye.

At the beginning of June 1672, the Noble and Prudent Earl of *Salisbury* having this Fever with *Gripes*, yet his Belly was bound, sent for me, and was cured by the Method proposed: Nor had I any occasion for any other as long as this Fever continued.

In young People, and sometimes in others that were a little older, this Fever sometime seized the Head, so that the Sick was delirious, but not raving, as in other Fevers, but was stupid. This happened chiefly to those, who at the beginning of the Disease unluckily endeavour'd with all their might to force Sweat: I was not so happy at that time as to be able to relieve such, though I moved every Stone, and used all the noted Medicines for this purpose. And so much for the Fever of this Constitution.

CHAP. V.

Of the Measles in the Year 1670.

These Measles began very early, as they were wont to do, viz. at the beginning of January, 1670. and increasing daily, came to their height in March, afterwards

they gradually decreased, and were quite extinguished in the following July. I will give an account of this sort, because I reckon them the most perfect of their kind that I hitherto observed.

This Disease began and ended at the times above-mentioned; it chiefly invaded Infants, and all those that were together in the same House. It began with shaking and shivering, and with an inequality of Heat and Cold, which mutually expelled one another the first day; the second day it ended in a perfect Fever, with violent Sickness, Thirst, and want of Appetite; the Tongue was white, but not dry; there was a small Cough, with an Heaviness of the Head and Eyes, accompanied with a continual Drowsiness, and for the most part an Humour distill'd from the Eyes and Nose; and this effusion of Tears is a certain sign of the approaching Measles, whereunto this is to be added, no less certain, viz. That tho' this Disease shews it self most commonly in the Face, after the manner of little Swellings in the Skin, yet in the Breast rather red broad Spots than Swellings are perceived, rising no higher than the Superficies of the Skin; the Patient sneezes, as if he had taken cold; and the Eye-lids swell a little before they come out; he vomits, but is oftener troubled with a Looseness, and the Stools are greenish; but this happens chiefly to Children that are breeding their Teeth; and they are more sroward in this Disease than they are wont to be. The Symptoms encrease for the most part till the fourth day, and then generally (though sometimes they are deferred to the fifth day) little red Spots, like Flea-bites, begin to come out about the Forehead, and other parts of the Face, and being encreased in number and bigness, branch into one another, and so paint the Face with large red Spots of various Figures; which are occasion'd by little red Wheals not far distant one from another, that are elevated a little above the Skin, and their Protuberances may be perceiv'd by a gentle touch, though they can scarce be seen; these Spots spread themselves by degrees from the Face, which first they only possessed, to the Breast, Belly, Thighs, and Legs, but they affect the Trunk and Members with redness only, without any sensible inequality of the Skin. The Symptoms of the Measles do not abate by the Eruption, as in the Small-Pox, yet I never observed the Vomiting afterwards; but the Cough and Fever encrease,

crease, with the difficulty of breathing, weakness of the Eyes, and the defluxion on them, with continual drowsiness, and want of Appetite, as before. On the sixth day, or thereabouts, the Skin breaking, and the Pustles drying off, the Forehead and Face grow rough, and at the same time the Spots in the other parts of the Body are very large, and very red. About the eighth Day the Spots in the Face vanish, and are scarce perceived in the rest of the Body: But on the ninth Day they quite disappear. The Face and Members, and sometimes the whole Body, seem as it were to be sprinkled with Bran all over, viz. Particles of broken Skin being raised up, and scarce sticking together, are torn in pieces now the Disease is going off, and afterwards fall from the Body like Scales; and, as we have said, the Measles most commonly disappear on the eighth Day, at which time the common People (being deceived by reckoning upon the time the Small-Pox are wont to continue) affirm, they are struck in, though really they have finished their course; and they think the Symptoms which come on their going off are occasion'd by their being struck in so soon; for 'tis to be noted, that the Fever and difficulty of breathing are encreased at that time, and the Cough is more troublesome, so that the sick can neither sleep night nor day. Children are chiefly subject to this ill Symptom, which appears now at the going off of the Measles, by reason of too hot a Regimen, or hot Medicines, that were used to force them out, and so they are cast into a *Peripneumonia*, which destroys more than the Small-Pox, or any Symptom thereunto belonging: And yet the Measles are not at all dangerous if they are skilfully treated: And among the rest of the ill Symptoms, a Looseneis often happens, which either presently succeeds the Disease, or also continues many Weeks, after it and all its Symptoms are gone off, not without great danger to the Patient, by reason of a continual loss of Spirits; and sometimes after a very hot Regimen, the Measles are first livid, afterwards black; but this only happens to grown People, and they are utterly lost when the blackness first appears, unless they are presently relieved by bleeding, and a more temperate Regimen.

As the Measles are much of the same Nature with the Small-Pox, so is the Method of Cure much the same; but Medicines and an hot Regimen are very dangerous, how

frequent, soever they be used by ignorant Nurses to drive the Disease from the Heart. This Method, above others, has been most successful in my Practice, viz. that the sick be kept in his Bed only two or three days after they come out, that the Blood may gently breath out, according to its own Genius, thro' the Pores of the Skin, the inflamed Particles that are easily separable which offend her; and that he have no more Clothes nor Fire than he is wont to have when he is well. I forbid all Flesh, and allowed him Oatmeal and Barley-broth, and the like, and sometimes a roasted Apple: His Drink was either small Beer, or Milk boiled with thrice the quantity of Water. I often mitigated the Cough, which almost continually accompanies this Disease, with a draught of some Pectoral Decoction, or with a proper *Linctus* taken now and then; but above all the rest, I took care to give *Diacodium* every Night through the whole course of this Disease. For instance:

Take of Pectoral Decoction one Pint and an half, of Syrup of Violets and Maidenhair, each one Ounce and an half; mingle them, and make an Apozeme; Take three or four Ounces three or four times a day.

Take of the Oyl of Sweet-Almonds two Ounces, of Syrup of Violets and Maidenhair each one Ounce, of white Sugar-candy a sufficient quantity, mingle them, and make a Linctus, whereof let him lick often, especially when his Cough troubles him.

Take of Blackberry-water three Ounces, of Diacodium one Ounce; mingle them for a draught to be taken every Night.

But if the Patient is an Infant, the Dose of the Pectoral and of the Anodyne must be lessened with respect to the Age.

He that uses this Regimen seldom does amiss, nor is he molested with any other Symptoms than what are necessary and inevitable in this Disease; the Cough is most troublesome, but is not dangerous, if it does not continue after the Disease is gone off; and if it does remain a Week or Fortnight, it is easily cured by Pectorals and the open Air; nay, it decreases of its own accord, and at length ceases.

coases. But if by reason of too hot Cordials, and too hot a Regimen, the Sick is in danger of his Life after the Measles go off, (which is very common) by the violent Fever and difficulty of breathing, and other Accidents that are wont to afflict those that have a *Peripneumonia*, I have order'd the smallest Infants to be bled in the Arm, and have taken away that quantity of Blood which their Age and Strength indicated, with very great success; and sometime when the Disease has been obstinate, I have not fear'd to repeat Bleeding: And, indeed, many Children that have been at the point of Death, by reason of this Symptom, have been (*With God's Blessing*) cured by Bleeding: Nor have I found as yet any other certain way to vanquish it. This happens to them after the Measles go off, and is so very fatal, that it may be well reckon'd the chief Minister of Death, destroying even more than the *Small-Pox*; nor have I yet found any other certain way of taking off this Symptom. And the Looseness, which, as we said, follows the *Measles*, is also cured by bleeding; for whereas it arises from Vapours of inflamed Blood rushing upon the Guts, (which is also common in a *Pleurisie*, *Peripneumonia*, and other Diseases that are occasion'd by an Inflammation) whereby they are stimulated to Excretion, 'tis Bleeding alone that gives relief, by making revulsion of those sharp Humours, and by reducing the Blood to a due temper.

Nor is there any reason why any one should wonder that I Bleed young Children, whereas for what I have hitherto observed, it may be as safely performed in Children as in grown Persons: And, indeed, it is so necessary, that we can neither cure the Symptom above-mentioned, nor some other that happen to Children, without it; for by what means can we relieve those that are Breeding Teeth from *Convulsions*, which seize them in the ninth and tenth Month with a swelling and pain of the Gums, whereby the Nerves are oppressed and enraged, and from whence also the Fits come, but by Bleedings, which alone is much to be preferred in this case, before the most celebrated Specificks whatever that are yet known, whereof some do hurt by there adventitious heat, and whilst they are thought to cure the Disease by an occult Faculty, they encrease it by their manifest heat, and kill the Sick. I pass by at present that wonderful relief which Bleeding gives in the *hooping Cough*, where-

wherein it far surpasses all Pectoral Medicines whatever.

What we have said now of the Cure of those Symptoms, that come upon the going off of the Measles, may be sometimes also of use when they are at the height, if they are occasioned by an artificial heat, if I may say so, In this Year 1670, I was called to visit a Maid-servant of the Lady Ann Barington's, that had this Disease, together with a Fever, difficulty of breathing, and purple Spots all over her Body, with very many other dangerous Symptoms; all which I attributed to the hot Regimen and Medicines which were too much used. I order'd her to be bled in the Arm, and I prescribed a cooling Pectoral Pilsan to be taken often, by the help whereof, and a temperate Regimen, the purple Spots, and all the other Symptoms, went off by degrees.

This Disease, as I said before, began in *January*, and encreased daily till *March*, and afterwards decreased gradually, and ended the following *July*, only it appeared in some few places the next Spring, but rarely, neither returned they again through all the Years wherein this Constitution reigned. And so much for the Measles.

C H A P. VI.

Of the Irregular Small-Pox in the Year 1670, 71, 72.

THE aforesaid-mentioned *Measles*, as we said before, introduced another sort of *Small Pox*, different from those we treated of before: they broke out much about the same time with them, viz. at the beginning of *January* 1669. But though they were not so Epidemical as the Measles, yet they accompanied them all the time they reigned; and after they ceased, the *Small-Pox* continued the rest of the time of this Constitution; yet notwithstanding, it gave place to the *Bloody-flux*, which reigned by the assistance of *Autumn* favouring it. But in the *Winter* it returned again, the *Flux* being suppressed by the cold; that was disagreeable to it: And they kept this Order through all the Years of this Constitution; only the last *Autumn* it reigned, namely, in the Year 1672, that

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Constitution then fading, and slowly promoting the Flux, that was then growing old, the *Small-Pox*, contrary to custom, raged at this time also, and so equally reigned with the Flux, that it was not easie to say which seized more People, though I guess the Flux was yet more prevalent.

The *Small-Pox*, as other Epidemicks were very severe at their first approach, and encreased daily till they came to their height, which when they had passed they decreased gradually, both as to the violence of the Symptoms, and number of the Sick.

But now, to come to their particular *Phænomena*: I was not a little astonished when this sort of *Small-Pox* first appeared; for I found they differ'd in many notable Symptoms from that kind which the preceding Constitution produced; in the observing whereof I had heretofore been very diligent, at present I will only treat of the Symptoms that differ from those of the other kinds, omitting those that were also common to that sort, which I have described at large above.

The distinct kind was distinguish'd from the common distinct sort of the other Constitution, as follows: First, whereas those did not come out before the fourth day, these came out most commonly on the third, which indeed, was usual in the Flux. Secondly, the Pustles were not so big as in the former, but more angry, and about the end of the Disease, when they came to Maturity, they were often black. Moreover, (but rarely) the Sick was troubled with Salivation as in the *Flux-Pox*, though the Pustles were but few: From whence it appears, that this kind was much of the Nature of the Flux, and did partake of a more intense Inflammation than was wont to be in the distinct sort.

But the Flux differ'd from others of the same sort, that I have observed in other Years in many things, which I will now reckon up. They appear'd on the second or third day in the shape of a reddish uniform Swelling, covering the whole Face, and thicker than an *Erysipelas*, and scarce any visible distance between the Pustles, with an heap of almost infinite red angry Pimples running into one, and disguising the whole Body, where between the Pustles, especially in the Thighs appear'd some little Blisters very conspicuous like a Burn, and distended with clear Water, which flowed out plentifully when the Skin was broken

broken, the Flesh underneath being black like a Mortification. But this dreadful Symptom was rare, and happen'd only in the first Month that this kind reigned; at which time, among others that were so grievously tormented, I was sent for at the beginning of *January*, 1669, by Mr. *Col-Jins* a Brewer, whose Son being an Infant, had Bladders on his Thighs as big as a Wall-nut, full of clear Water, which being broken, the Flesh underneath appear'd as it were mortified, and soon after he died, which was the lot of all I ever saw that had this dreadful Symptom. On the eleventh day, or thereabouts, a white shining Skin covered the redish swelling in many parts of the Face, and by degrees spread over the whole Countenance, a little while after this white Skin cast forth a crusty shining Matter; the colour of it was neither yellow nor brown, (both which were to be seen in the other kind of *Pox*) but a deep red like clotted Blood, which as the Pustles ripened waxed black, till the whole Face was as black as Soot; and whereas in the other kind of *Flux* the Sick was in the greatest danger on the eleventh day, and that was the last to most that died; in this sort the Patient lived most commonly till the fourteenth day, and sometimes to the fifteenth, (unless a violent hot Regimen destroyed him sooner) which at length being passed, the danger was over: But this is to be noted, that they who had those deadly Bladders and Mortification we told you happened to some in the first Month that this kind broke out in, died within few days after the Eruption.

The *Fever*, and all other Symptoms which preceded or accompanied this kind of *Pox*, were more violent than in the former, and had manifest Tokens of a greater Inflammation, the Sick were more prone to the Salivation, the Pustles angrier and much smaller, so that 'twas not easie at first when they appeared to distinguish them from an *Erysipelas*, or the Measles, if these were not known by the day of their Eruption and other signs abovemention'd in the History of the *Measles*; after the Pustles fell off, a Scurf stuck on a long time, which imprinted filthy Scars on the Skin; 'tis fit to be noted that when these *Small-Pox* were iraged by an hot Regimen, it sometimes occasioned a *Bloody-Flux*, which I have observed more than once.

But I must acquaint you, that these *Small-Pox* were not accompanied with such dreadful Symptoms all the while they

they reigned, for after they had passed two Years, they begun to grow mild in the third Year, viz. in 1672, and having put off the black colour, they grew by degrees yellow, like an Honey-comb, which was natural to the regular *Small-Pox*, when they come to Maturity; so that in the last Years of this Constitution, they were very benign and favourable, considering the kind, yet notwithstanding it was very manifest that they were of a quite different sort by the smallness of the Pustles, and Disposition of spitting, and other things.

Tho' by Reason of the ignorance of the Causes of every Specifick difference, 'tis impossible for us to comprehend the formal Reason of these *Small-Pox*, as they are distinguished from those which the other Constitution produced, yet it plainly appears to me from all the *Phænomena*, that the inflammation in these was much greater than in the other, and that therefore the chief care shou'd be to stop the violent ebullition of the Blood, and this is to be done (Hypnoticks being first used as above-mentioned) by a temperate Regimen, viz. by allowing the Patient the free use of some Liquor which will not heat him, but rather presently mitigate that violent heat, whereby this Disease wears and scorches the poor Patient more than any other whatever, especially when the Pustles begin to ripen; the white decoction of Bread, and a small quantity of calcined Harts-horn in a large quantity of Water, sweetned with Sugar, is very good; but Milk-Water made with three parts of Water and one of Milk boyl'd together is better, for 'tis more palatable, and more cooling; nor is a large quantity of Liquor only proper to extinguish the violent heat that chiefly rages with the Fever of maturation, but it also promotes Salivation, and protracts it longer than it cou'd be, if the Patient were scorched up. Moreover I have often observed that great quantities of Liquors drank, have succeeded so well, that by their use the *Small-Pox*, which when they came out had the worst signs of the Flux, afterwards were distinct, and the Pustles, which otherwise as they ripened, wou'd have cast forth first a red, and then presently a black matter, were very yellow, and instead of being very small and angry, they were benign and favourable. Nor does the Flux of the courses which is very frequent to Women that have this Disease any whit prohibit, but rather encourage the free use of these Liquors, viz. if they flow
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at an unusual time; for Women are in danger upon no other account, but because the Blood being too much thinned, by the immoderate Heat, should break out at the natural passages, especially when rash Nurses add Oyl to the Flame, by using an hot Regimen, and the Decoction of Harts-horn and Marigold-flowers, and the like; for whatever powerfully dilutes and temperates the Blood, necessarily conduces, tho' not immediately, to the preserving the Pustles, and the swelling of the Face and Hands in their state, in as much as it stops the foresaid Flux; whereas on the contrary hot Medicines, tho' they seem more proper in this case, yet while they promote this continual Flux of Blood, they are much besides the business; neither do I question but many Women have perished by this error, *viz.* while the By-standers, fearing lest the Pustles should flatten by reason of this Flux of Blood, have endeavoured to keep them up by Cordial Medicines, and an hot Regimen, whereby they have certainly cast away the poor Women, tho' by mingling various Astringents with these Cordials they laboured to stop the Hemorrhage, and to keep the Pustles and swelling up at their due height.

Not long ago a very Virtuous and Noble Lady was committed to my care, who had the dangerous black Small-Pox, and tho' at the beginning I forbid all those things that might exagitate the Blood, yet she being of a very Sanguine Complexion, and Brisk and Young, the Season of the year being very hot, she was seized of a sudden, on the third day after the Eruption, with so large a Flux of the Courtes at an unusual time, that the Women that were by thought she Miscarried; but tho' this Symptom continued violent for many days, yet I did not think that I ought therefore to intermit the use of the Milk water, indeed I thought it more necessary now, and allowed her to drink of it freely, through the whole course of the Disease, especially when the Fever of maturation appear'd, at which time the Learned and Candid Physician Dr. Millington, heretofore my fellow Collegiate, and now my very good Friend was joyned with me, who perceiving that all things succeeded well according to the genius of the Disease, readily consented that our Patient should persist in drinking freely of the foresaid Liquor, which she often declared both cooled and refreshed her, and promoted her Spitting. But when the Face began to be crusted over, we were afraid

afraid that our Patient would be injured by putrid Vapours, arising from the Purulent Matter Introverted, which smelt ill in this worst sort of *Small-Pox*; and therefore we ordered a few Spoonfulls of mulled Sack to be taken once in a day, or as often as she found her self ill in her stomach; and with these few things she recovered together with a Paregorick draught, which was taken every Night; nor was she Delirious, nor had any other Symptom besides the fore-said Hemorrhage, which threatned any great danger; the Face and Hands swell'd sufficiently, the Pustles were as big as this sort wou'd permit; and the Salivation was large and easie to the end; and lastly, tho' the Pustles in the Face seem'd blackish when they ripened, yet in most parts they were yellow.

But by how many degrees soever of heat and inflammation this sort of *Pox* peculiar to this Constitution exceeded others of other Constitutions, yet if the Pustles were distinct or but few, experience taught that there was not such need to drink so great a quantity of the fore-said Liquors. But it was sufficient if the Patient drank Small-beer, when he was thirsty, and eat Water-gruel, and sometimes a roasted Apple; and if he were pass'd Fourteen, he took *Diacodium* when he was Sick, or began to be Delirious for want of Sleep; nor did I do any thing else (only keep the Patient a Bed) when the Pustles were few. And by this method alone my Son *William Sydenham* was recovered by Gods assistance from this distinct sort, in December 1670. I will say no more of the *Small-Pox* of this Constitution, seeing I have discoursed largely of the other kind, from which these only differ'd in this, *viz.* that they were of an hotter and more inflammatory Nature, so that greater care was required to extinguish the intense heat, which was so natural to them, and so certainly threatned to fire the Patient.

C H A P. VII.

*Of the Bilious Cholick of the Years 1670,
71, 72.*

THough all the Years of this Constitution, the Blood was much disposed to fling off on the Bowels hot and Cholerick humours; for which reason this Cholick was more frequent than is usual, which Disease, tho' it ought to be reckon'd amongst the Chronical, and therefore besides my purpose, yet seeing it depended on the same indispotion of the Blood at this time, from whence most other Epidemics, which then reigned, took their rise, it ought here also to be treated of; but especially because the very same Feverish Symptoms went before this Disease, as were wont to precede the *Bloody Flux*, which reigned in those times. And sometimes this Disease, which is noted above, followed the Dysentery when it had a long while afflicted the Sick, and was just about to leave him; but when it did not follow a long Dysentery, it generally took its rise from a Fever, which after some hours was wont to end in this Disease. It chiefly seized young People of an hot and Cholerick Constitution, especially in the Summer; the pain of the Bowels was very violent, and more intollerable than any, that afflicts poor Mortals; it sometimes binds as it were in the Guts, and sometimes being contracted to a point, it bores like an Augur; the pain now and then abates, and presently the fit approaches again, which as soon as the Sick perceives, he looks sadly and bemoans himself, as if it were actually on him. At the beginning of this Disease the pain is not so certainly determined to one point as in the progress of it, nor is the vomiting so frequent, nor does the Belly so obstinately resist Purges; but the more the Pain is increased, the more pertinaciously is it fixt in a point; the Vomiting is more frequent, and the Belly more bound, till at length by the dreadful force of these Symptoms a total inversion of the Peristaltick Motion of the Guts (if the Sick is not sooner reliev'd) and consequently an Iliack passion is occasioned, in which Disease
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all Purging Medicines are presently vomited up with the Excrements; the matter that is cast up in this manner, if it be without mixture, is sometimes Green, and sometimes Yellow, and sometimes of an unusual Colour.

Now every *Phænomenon* of this Disease shewing plainly that it was occasion'd by some acrid Humour, or Vapour put off from the Blood on the Guts; this, in my opinion, is the chief curative indication, *viz.* that the said Humour shou'd be evacuated, as well that which is antecedently in the Veins, as that which is contained in the Intestines, and the next to this is, that the force of the Humours tending thither should be restrained by Anodynes, and that the violent Pain should be mitigated by them.

Therefore I order that the Blood should be freely taken from the Arm, if no Blood has been taken away before; and after three or four Hours I give an Anodyne. The next Day I order some gentle Purge, and that it should be repeated the next Day save one, and sometimes thrice, according as the reliicks of the Humour are more or less.

But we must take notice that if this Disease is occasioned by eating too much Fruit, or from any Meat of hard digestion, upon which account ill and corrupted juices are first transmitted to the Blood, and afterwards to the Guts, I say in this Case the Stomach must be washed with Possie-drink drunk plentifully, which must be vomited up again, which being done, an Anodyne must be given, and the next Day a Vein must be opened: and as to other things, you must proceed according to the directions above-mention'd: But when the violence of the Pain, and the vomiting (by reason whereof the Guts are as it were inverted) resist the operations of the Purges, they must be made stronger; for 'tis to no purpose to give a gentle Purge, unless the Sick is easily purged, which must be carefully enquired into; for such a Medicine being not strong enough to make its way through the Guts, the Patient is more injured thereby, for by its ineffectual agitation the vomiting and pain are encreased. A lenitive purging Potion of the infusion of *Tamarinds*, of the leaves of *Senna* and *Rhubarb*, wherein may be dissolved *Manna* and Syrup of *Roses* solutive, is to be preferred before the other Purges; for it fits the Humours least. But if the Patient cannot retain a liquid Medicine by reason of an aversion,

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or because of the vomiting, you must necessarily use Pills: the Pill *Cochia* pleases me best, for they pass best through the Body in this and most other cases; but when the weakness of the Stomach, or the vomiting is so great, that the Pills cannot be retained; then I first order an Anodyne, and few hours after a Purge; but there must be so much space betwixt them, that the Purge be not quelled by the Anodyne, and made ineffectual; but that it may continue so long in the Stomach as is necessary for its imparting its purgative quality to it, that it may operate when the vertue of the Narcotick is spent, tho' the Purge, if it could be conveniently done is best given a long while after the Anodyne, for twelve hours after taking it the Sick is difficultly purged.

But because in this, as in most other Diseases wherein Anodynes are indicated, a Purge always encreases the Pain (at least when it has done working, for while it's in Operation the Patient is not so ill) therefore I commonly give an Anodyne, as soon as the Purge has done working, which I order to be taken Morning and Evening daily, viz. in the middle space betwixt the Purges, that I may the more certainly appease the Pain till the Patient has been sufficiently purged.

The purging of the Humours being over, I endeavour to bridle the fury of the Disease (which now only remains to be done) by giving an Anodyne constantly Morning and Evening, which must be sometimes repeated oftner; nor could I ever take off violent Pains without a larger Dose than is usual, and that repeated too; for that which is sufficient to conquer another Disease will be wholly insufficient in this Case, the violence of the Disease subduing the force of the Medicine; and it's indeed safe to repeat Anodynes while such a Pain as this continues violent, but not when 'tis gone off; wherefore I repeat the Narcotick according to the degree of the Pain till it ceases, or till it is very much lessened, yet there must be such a space of time betwixt them, that I may find what may be hoped for from the former Dose, before I give another. But for the most part, unless the Pain is very violent, a Paregorick given Morning and Evening may be sufficient. I chiefly use liquid Laudanum, whereof I give sixteen drops in some Cordial-Water, or the Dose may be increased according to the violence of the Pain.

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This plain Method whereby first the peccant Matter is evacuated by Bleeding and Purging, and then Ease procured by the use of Anodynes, succeeded better in my Practice than any other I ever knew; whereas Carminative Glysters injected in order to expel the acrid Humours, do only stir the Coals, and make the Disease the more lasting by the tumult they raise in the Humours: But here you must take notice, that though I have said Bleeding and Purging must necessarily go before this quieting Method, yet sometimes upon occasion, both being omitted, you must begin with Anodynes: For instance; when by reason of some preceding Sickness large Evacuations have been used, not long before the coming of the Cholick (for many times they who have recovered of another Disease have suddenly fallen into this, by reason of a weakness of the Bowels, especially if there is a great degree of heat occasioned by drinking Wine, or some other Spirituous Liquor immoderately,) I say in this case, 'tis not only unnecessary, but I think 'tis injurious, to give Purges again, for new Tumults will be raised by them. Moreover, the Guts are most commonly sufficiently cleansed with Glysters used often before the Physician is called, so that partly for this Cause, and partly by reason of the long continuance of the Disease, Narcoticks in a manner seem to be only useful.

In August 1671, the Noble Baron *Annesly* being seized with the Bilious Cholick with intolerable Pain, and frequent Vomiting for some Days, sent for me to the Castle of *Belvoir*; he had tryed all sorts of Glysters and other Remedies, by the order of Learned and Experienced Physicians living thereabouts: I advised without any more ado, the repeated use of Anodynes; according to the Method before delivered, whereby he recover'd in a few Days, and came to Town well with me.

But because this Pain is wont of its own Nature to return more than any other, all occasions of its relapse must be prevented, by giving an Anodyne twice a day for some days; but if as often as the use of the Anodyne is omitted, the Pain now and then returns, as it sometimes happens, I do not know any thing that will so certainly perfect the Cure as Riding on Horse-back, or in a Coach a long Journey; but an Anodyne must be given constantly Morning and

Evening: for by this kind of Exercise the Matter causing the Disease is removed to the Habit of the Body, and the Blood being broke into small parts by continual motion, is as it were, depurated again, and at length the Guts are much strengthened and refreshed by this way of stirring up the natural heat; nor am I ashamed to confess, that by this Exercise I have more than once perfectly cured this Disease, when I could not cure it any other way: But this must not be used before the Sick has been well purged, and then he must continue the use of it many Days.

One of my poor Neighbours, who is now living, was in these Years troubled with a most violent *Bilious Cholick*, who a long time endeavoured, but in vain, to vanquish this Disease by Purges, Glysters, and the swallowing of leaden Bullets; I order'd him to use Narcoticks frequently, which he did successfully; for as often as he used them he found himself very easie. But seeing the Disease was only palliated, and not cured (for it returned as soon as the Virtue of the Anodyne was spent) I took pity on him, and lent him one of my Horses, that he might go a Journey, as above directed; and having travell'd a few Days, his Bowels grew so strong, as to be able to shake off the Relicks of the Disease; and so he was perfectly recovered without the help of Anodynes.

And truly I have known this kind of Exercise has been always used with admirable success in most other Chronical Diseases, if the Sick continued it resolutely: For if we consider with our selves, that the lower Belly, wherein are placed the Organs of Secrecion, are much shaken by this Exercise, perhaps some Thousands of times in a day, we shall easily believe, that they are able, by the help of the foresaid Exercise, to shake off any Excrementitious Juice that is impacted there, and (which is of greater moment yet) that they are so strengthened by the powerful excitation of the native heat, that they may duly perform the Office of Purifying the Blood, which Nature has appointed them.

If the Patient is young and of a hot Constitution, I prescribe a cooling and thickning Diet, as Pulp of Barley, Panado, and the like; and every third day, if the Stomach is craving, a Chick, or a Whiting boyled. I allow no other Drink than Small-beer, or Milk-water; and this

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is all I order; unless Riding, necessary to recover the Health, requires more generous Liquors, and more nourishing Food, whereby the Spirits, weaken'd by Exercise, may be repaired.

Moreover, 'tis plain from observation, that when the Disease, by reason of ill management, has a long while afflicted the Sick, so that the Bowels become weak and infirm, and he is in a manner quite wasted; I say, in this Case we find by Experience, that the free use of Epidemick-water, or of *Aqua-Mirabilis*, or of any other the Sick likes best, relieves him at this time beyond expectation; for by this means the small Relicks of the native Heat and the Spirits will be stirred up, and the preternatural ferment sticking to the Bowels, and now and then causing new Fits, will be extinguish'd by spirituous Liquors.

Moreover, as in the cure of the Disease, so when 'tis over, the thin Diet we have mentioned must be observed for some time; for this being more apt to return than any other, and seating itself on the principal Parts for Concoction (I mean the Bowels, already weakened by it) the least Error of this kind will presently cause much Pain: therefore in this, and all other Diseases of the Bowels, Mears of hard Digestion must be carefully avoided, and things of easie Digestion must be used only in such a quantity as will be sufficient to sustain Life.

A kind of Hysterick Disease afflicts some Women, very like the *Bilious Cholick*, both as to the violence and situation of the Pain, and also by reason of the Humours vomited up of a yellow and green Colour. I will treat of it by the by, lest any one should take it for the *Bilious Cholick* mentioned just now.

Such Women as are of a crude and lax Habit of Body are chiefly afflicted with this Disease, and they that have laboured under some other Hysterick Indisposition (or which is very often) those that have scarce evaded a difficult and hard Labour in bringing forth a large Child, whereby the Mother's Nature and Strength have been almost spent; a Pain almost as violent as that of the *Cholick* or *Black Passion* seizes the Region of the Stomach, and sometimes it comes a little lower, and then violent Vomitings follow, and the Matter which is cast up is sometimes yellow and sometimes green. And moreover (which I have often observed) there is a greater dejection of Spirit, and

Desperation, than in any other Disease whatever. After a Day or two the Pain goes off, and returns again a few Weeks after as violently as ever. Sometimes it is accompanied with the *Jaundice*, which is very visible, and which goes off of its own accord in a few Days. When all the Symptoms are gone off, and when the Patient seems very well, the smallest Disorder of Mind, whether it is occasioned by Anger or Sorrow (to both which in this Case Women are very prone) almost recalls the Pain. The same may be said of Walking, or any other Exercise used too soon; for by these means Vapours are Elevated in a weak and lax habit of Body, when according to the vulgar Opinion, I say, vapours, whether they be so or no, or whether they are Convulsions of particular Parts, the *Phænomena* may be solved either way. These Vapours, or Convulsions, when they have invaded this or that Region of the Body, produce Symptoms agreeable to the Part they invade; and though they are one and the same Disease every where, yet they cunningly resemble most of the Diseases Mankind are exposed to; which is manifest from this Symptom, which when it seizes on the Parts near the Colon, imitates exactly the *bilious Cholick*, which is also apparent in many other Diseases of the Body afflicted with this Disease. For instance; sometimes it seizes one of the Kidneys with a violent Pain, from whence arises violent Vomiting, and being oftentimes conveyed by the Passage of the Ureter, it resembles the *Stone*, and being exasperated by Glysters, and other Lithonriptick Medicines used to force away the *Stone*; it afflicts the sick in the same manner a long while, and sometimes (contrary to its Nature, for left to itself it is no way dangerous) kills the Patient. Moreover I have seen Symptoms occasioned by it resembling exactly the *Stone* in the Bladder. I was called up not long ago in the Night to visit a Countess my Neighbour, suddenly seized with a violent Pain in the Region of the Bladder, and with a suppression of Urine; and having understood that she was subject to many Hysterick Indispositions, I thought the Disease was not that they imagined it to be; and therefore I would not permit her Maid to inject a Glyster she had prepared, lest thereby the Disease should be encreased, and instead of this and Emollents, viz. Syrup of Marsh-mallows, and the like, which the Apothecary

the cary had brought, I ordered an Anodyne, which soon removed the Symptom. And indeed there is not one part of the Body quite secured from the Assaults of this Disease, whether they are inward or outward, as the Jaws, Hips, and Legs, in all which it excites violent Pain, and when it goes off leaves a Tenderness behind, which will not bear touching, just as if the Flesh was bruised with violent strokes.

But now, seeing I have said something by the bye appertaining to the History of the *Hysterick Cholick*, lest it should be mistaken for the *Bilious Cholick*, I will transiently touch on some things relating to the cure of the Symptom of Pain which accompanies it; for the perfect Cure which takes off the Disease by removing the Cause, comes under another Speculation, and belongs to another Place.

Bleeding and Purging repeated, which are plainly indicated at the beginning of a *bilious Cholick*, are not to be used here, unless in the Case to be mentioned by and by; for Experience teaches, that the Pain is exasperated, and that all the Symptoms encrease by reason of the Tumult which those things occasion; and I have more than once observed, that the repetition of the gentlest Glysters has brought on a long Series of Symptoms; and Reason as well as Experience, dictates, that this Disease is rather Produced by an inordinate motion of the Spirits, than by vicious Humours, if we consider what things most commonly occasion it; and they are such as these; large and unnecessary profusions of Blood, violent Motions of the Body and Mind, and the like; all which forbid those Medicines that may occasion a greater disturbance of the Spirits, and instead of them Anodynes are to be used, though the green and ill colour of the Matter Vomited up seems to indicate the contrary; for the Speculation of Colours is too nice to authorize those Evacuations, which we find *in se facto* injurious; and I do not at all doubt that this Disease (which though it occasions violent Pain is no way mortal) has proved deadly by reason of the Errors committed on the belief of such Speculations; And besides, if any one should give the strongest Vomit to Day, to eject that which he supposes to be the occasion of the Disease, yet the next Day the Sick would Vomit up full as green, or of some other ill colour, as was the former.

But it is to be noted, that there is sometimes so great a quantity of Blood and Humours, which so oppose the operation of the Anodyne, that though it is often repeated, it cannot stop the Tumult till the Patient is blooded and purged, which I have observed in Women of a very sanguine Constitution, and in Viragors. If the Case is so, Bleeding or Purging, or perhaps both, must make way for the Narcotick, for either of these being used, a moderate Dose of the Narcotick will perform the business, which otherwise would signifie nothing, though the largest Dose was given. But this seldom happens, and then these Remedies must not be repeated; which being premised, when there is need of them, you must proceed in giving Anodynes in that Method which I have proposed in the *Bilious Cholick*, and they must be repeated according to the degrees of Pain; which Method indeed respects only the Symptom of violent Pain; for I do not now undertake to treat of that Method which takes off the Cause: but because this Disease in Hypochondriacal, as well as Hysterick People (for the Reason is the same in both, as shall be said in another place) often ends in the *Jaundice*; and as this comes on that goes off. We must take notice, that in curing this kind of *Jaundice*, all Purges are either wholly to be omitted, or if they are given, you must use only Rhubarb, or some other gentle Purge: For there is danger, lest by purging new Tumults should arise, and so all the Symptoms return. And therefore in this Case nothing must be done presently, seeing the *Jaundice* taking its rise on this account, commonly lessens of its own accord, and quite vanishes in a little time. But if it continues a long while, and seems to go off difficultly, Remedies must be taken for it; I use the following.

Take of the Roots of Madder and of Turmeric, each one Ounce, of all the greater Celandine, and of the tops of the lesser Centuary, each one handful; boyl them in equal parts of Rhenish wine and Fountain-water to a Quart; in the strained Liquor dissolve two Ounces of the Syrup of the five opening Roots; mingle them, make an Apozem; and let the Sick take half a Pint Morning and Evening till he is well.

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But if the *Jaundice* comes of it self, the *Cholick* not going before, it is necessary, besides the *Alteratives* just mentioned, to give *Cholagogues*, that is, such things as purge *Choler* by Stool, viz. once or twice before the Patient enters on the *Apozem* prescribed, and afterwards once a Week as long as he takes it.

As, Take of the *Electuary* of the Juice of *Roses* two Drams, of *Rhubarb* finely powder'd half a Dram, of *Cream of Tartar* one Scruple; make a Bolus, with a sufficient quantity of *Syrup* of *Rhubarb*, with *Succory*; give it early in the Morning, and let the Sick drink on it a small draught of *Rhenish-wine*.

But if notwithstanding the constant use of these things a long time, the Disease continues obstinate, the Patient must drink *Tunbridge-waters*, or the like, from the Fountain every Morning till he recovers. And so much for the Diseases of this Constitution.

SECT. V, CHAP. I.

Of the Epidemick Constitution of part of the Year 1673, and of the Years 1674, 75.

ABOUT the beginning of July 1673, another sort of *Fever* began, but was not very Epidemical, the Constitution being not as yet wholly disposed to it, for the Diseases of the foregoing Constitution were not quite excluded; for that sort of *Small-Pox* was not gone off, which began to invade in the Year 1670, but they did not happen so often, and their Symptoms were milder. So that both these Diseases kept pace in a manner with one another; but neither of them were very raging; the former Constitution being not so perfectly extinguished as yet, that no Diseases belonging to it should appear, (for a few *Dysenteries* remained) nor was the new one so confirmed as to produce such as were able to expel all the rest.

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And all this Autumn and Winter the *Small-Pox* kept pace with this *Fever*, but neither Disease was very raging; and in the mean while the *Bloody-Flux* was in a manner extinguished; but in *November* following, after an hard Frost that continued some days, the Weather contrary to expectation, was hotter than ever I knew it at that time of the Year; and a little before, and about *Christmas* the *Bloody-Flux* was here and there a little, but it seemed to be expiring, and soon after it went quite off, at least this sort of it.

Very early the following Year, viz. in *January*, the *Measles* invaded, and were as Epidemical, as those were which began almost at the same time of the Year 1670, for they visited almost every Family, especially all the Children, but they were not so regular as those which reigned in the foresaid Year: But I shall say more of the difference betwixt them, when I come to treat more particularly of these; they encreased more and more daily till the *Vernal Equinox*, and then they decreased gradually, and vanished a little after *Midsummer*.

And as the *Epidemick Measles*, which invaded at the beginning of the Year 1670, introduced the *black Small-Pox*; these in like manner being as Epidemical as they, came at the beginning of this Year, and were also accompanied with a sort of *Small-Pox* that were like them; For whereas (which was noted before) the *Small-Pox* of the preceding Constitution, after the first two Years, sent forth Pustles that were less and less black, and that moreover by degrees grew bigger and bigger, till about the end of 1673, they were gentle, and benign as to their kind, now they returned, being accompanied with the worst Symptoms, and their wonted fierceness. This sort of *Small-Pox* prevailed the next Autumn, and longer than ordinary in the Winter, for the unusual warmth of it favoured this Disease; but when the Season grew colder they abated, and gave way to the *Fever* that now prevailed.

This *Fever*, that had continued all the Year, was very Epidemick at the beginning of *July* 75; but towards Autumn it began to turn in on the Bowels, sometimes appearing with the Symptoms of the *Bloody-flux*, and sometimes with those of a Looseness, though sometimes it was accompanied with neither, but seizing the Heart, it rendered the Sick

Of the Epidemick Constitution, &c. 133

Sick stupid. The *Small-pox* in the mean while, which seized here and there a few, quite vanished about the *Autumnal Equinox*; for now the *Fever* prevailing over the other Epidemics, possess'd the Government: yet it is to be observed, That this *Fever* being prone to put off the morbid Matter upon the *Bowels*, which sometimes occasioned the *Bloody-Flux*; but oftner a Looseness; 'twas vulgarly suppos'd, that the *Gripes*, were the destructive Disease, whereas they were really to be imputed to the *Fever*; for every one knew, that had the care of the Sick, how prevailing the *Fever* was, and that the *Bloody-flux* and Looseness were rather Symptoms than Essential Diseases.

This *Fever* held this course all the Autumn, sometimes seizing the Head, sometimes the Bowels, raging every where under the disguise of Symptoms happening to those parts, till the end of *October*; at which time the Season, which till then was warm, and like Summer, presently changed to cold and moist; on which account *Catarrhs* and *Coughs* were more frequent than I ever knew them at any other time. But that which was of greatest moment, the *Stationary Fever* of this Constitution was wont to come upon these *Coughs*, and took occasion from hence to rage more and more, and to vary some of its Symptoms; for whereas a little before it fell, as was said, most commonly on the 'foresaid Parts, now it seized chiefly the Lungs and Pleura; upon which account *Pleuritick* and *Peripneumonick Fevers* were occasioned; and yet it was the very same *Fever* that began in *July 1671*, and continued without any alteration of its Symptoms till the *Catarrhs* broke out.

These *Catarrhs* and *Coughs* persever'd to the end of *November*, but afterwards they lessened of a sudden; but the *Fever* continued the same as it was before the *Catarrhs* shew'd themselves, though it were not quite so Epidemical, nor accompanied with the same Symptoms; for both of these depended accidentally on the *Catarrhs*: But when the *Catarrhs* went off, the *Small-Pox* began to break out here and there, exactly of the same kind with those of the preceding Year. But now, when they had passed the second Year, the Symptoms were not so violent as when they first invaded. How long this Constitution will continue I cannot certainly say, but this I certainly know, viz. That hitherto it has been very irregular, and that all the Diseases of it were so also.

I will now treat of the Epidemics of this Constitution in the same order they followed one another.

CHAP. II.

Of the Continual Fever of the Years 1673, 74, 75.

THIS, as other Epidemics, was accompanied with Symptoms at the beginning, which shewed plainly, that the Inflammation was then greater and more Spirituous than when the Disease had continued longer: for the first Year it invaded, as also in the following Spring, Pleuritick Symptoms came upon the Fever, and the Blood taken away (especially the first or second time) was like the Blood of Pleuriticks; but in time the Signs of intense Inflammation ceased.

Besides the Symptoms common to all Fevers, these followed this Fever most commonly; the Sick was seized with a violent Pain of his Head and Back, also with a numbness and tense Pain of the Joints, and Limbs, and whole Body; but it was gentler than in a Rheumatism. Of the first days heat and cold succeeded one another, and sometimes at the beginning the Sick was prone to small Sweats.

The Tongue, when the Fever was left to its self, was neither dry, nor much different from the natural colour, only it was whiter and the Sick was not very thirsty; but if he was heated beyond the ordinary condition of the Fever, the Tongue was very dry, and of a deep yellow colour, the Thirst was encreased, and the Urine, which otherwise was almost of the natural colour, was very red.

The Fever, accompanied only with these Symptoms, if it was well managed, left the Sick on the fourteenth day; but when it was very obstinate it continued to the one and twentieth day.

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Among the Symptoms of this *Fever* there was one like a Coma, whereby the Sick became stupid and delirious, and sometimes he slept for some Weeks, and could be roused only by a great noise; whereby, being difficultly waked, he would at length open his Eyes, and having taken either a Medicine, or Drink, he fell asleep again, which was sometimes so profound, that it ended in loss of Speech.

He that was so affected, when he came to himself, began to recover on the twenty eighth or thirtieth day; the first sign whereof, was the desiring some unusual or absurd kind of Meat or Drink; the Head of the Person that was recovering was weak for some days, and would nod sometimes this way, sometimes that: There were also other Signs that shew'd the Head had been much disorder'd; but as the Strength returned this Symptom went off.

Sometimes the Sick did not sleep so much as rave silently, but he would sometimes speak incongruously, as if he were angry, but the Fury was not so much as is usual when People are light-headed in the *Small-Pox*, and other *Fevers*; and it was different also on this account, because he slept abruptly betwixt whiles, and snorted much. Moreover, though this Symptom was not so acute as the other, yet was it more lasting, and it happened most commonly to Children, or to those that were not full grown; whereas that beset grown People chiefly; but in both, if hot Medicines were taken, and Sweats forced, the Disease was soon translated to the Head, and the said Symptoms were occasion'd.

But when the Symptom neither came of it self, nor was forced by Medicines, the Disease went off most commonly within fourteen days, and sometimes in three or four days, as I have seen sometimes.

In Autumn 73, as we said before, the *Fever* endeavoured to go off by a *Dysentery*, and sometimes by a Looseness; the latter of these especially did often come, the Stupor yet remaining; but both of them, according to the best Observation I could make, were nothing but Symptoms of the *Fever*.

As to the Cure of this *Fever*, when it first began in July 1673, I presently found, both by the various Phenomena that were very different from those which accompanied the preceding *Fever*, and also because it did not yield to purging,

ging, whereby I successfully cured all the *Fevers* of the foregoing Constitution, that it was plainly of another kind; and I was longer in finding out the Species of it, than I used to be; and therefore I was very thoughtful to know which way I should proceed with it; for when this *Fever* first broke out, it had no Contemporary Epidemick, by whose Genius I might find out the Nature of this: For the *Small-Pox*, as I said, which accompanied it, were the Relicks of that black sort which invaded in the Year 1670, and were now very gentle, and going off in a manner; therefore I had no other way, than to enquire carefully of the Disease, as it stood alone by it self, and observe what did good or harm, The violent Pain of the Head, and the Propensity of this Disease to cause Pains in the Sides; also the Blood, which was like that of *Pleuriticks*, shewed plainly, that there was a great Inflammation in this Disease, and yet it would not bear that large Evacuation which was requisite in a *Pleurisie*; for the Blood, after the first or second Bleeding, was not of the colour of Glue, and the Sick was not relieved by Bleeding repeated, unless perchance the Disease turned to a *Pleurisie*; and so it did sometimes after too hot a Regimen, especially the first Spring it invaded, viz. in the Year 1664, at which time, being further'd by the heat of the Sun, (for as yet it was young and more spirituous than afterwards) it seem'd to incline to a *Peripneumonia*; but when by repeated Experience and Examples I was deterr'd from Bleeding, though it was very plain, that this *Fever*, especially at its first coming, was very inflammatory; nothing now remained whereby its heat might be extinguish'd besides Glysters often repeated, and cooling Medicines. But besides the Symptoms plainly shewing an Inflammation, the *Phenomenon* of insensibleness, which was more common in this *Fever* than in any other, wholly indicated, that Glysters were to be repeated often, whereby the febrile Matter which was so apt to seize the Head was diverted from it: Moreover they were substituted in the room of Bleeding repeated, which did not well agree with the Nature of this Disease, and they did supply the defect of it by gently attenuating the heat of the Blood, and by expelling the Morbifick Cause. Moreover, I judg'd that large Blisters applied to the Neck would be of greater use in this *Fever* than

In others, wherein the febrile Matter did not so much seize the Head: For by the violent heat and Pain which the said Blisters are wont to occasion in the part they are applied to, the Matter, which would otherwise seize the Head, fell upon the pained part; by these and a cooling Regimen, at length the Disease went off as it were naturally, and of its own accord, how much soever it raged when it was treated by a different Method, as was manifest to me by too many Experiments.

I proceeded therefore in the following manner. I took special care to bleed in the Arm, and I took away such a quantity of Blood, as was agreeable to the Strength, Age, and other Circumstances of the Patient, and almost at the same time I applied a larger Blister to the Neck: The next day I injected a lenitive Glyster so early, that the Tumult occasion'd by it might be quieted before Night, *viz.* I order'd it should be injected at two or three a Clock; I repeated this Glyster every day till the Disease abated, at which time, I suppose, it was to be omitted, and before, if the Fever continued longer than fourteen Days, and grew old. In which Case, tho' it was not abated by the preceding Glysters, yet I thought it was to no purpose to continue them longer; for the force of the Disease being blunted by the foregoing Ebullition, and the Sick out of Danger, the violent Symptoms being abated, the Disease was to be left to its own Genius, to go off leisurely of itself; which always succeeded better with me than the endeavouring any violent Evacuation: At this time I only forbid the Sick eating of Flesh, but I let him drink as much Small-beer as he would.

Another thing remains, which because I have found by much Experience, that it has been very beneficial to the Sick, I must not pass it by, whilst I am describing the Regimen of this Disease, *viz.* That the Sick must keep up a-days, at least for some Hours: But if the great Weakness of the Sick forbids it, he must at least put on his Cloaths, and lie on the Bed with his Head raised high: For when I had considered with what violent force the Fever was carried to the Head, and also the Inflammatory Disposition of the Blood, I thought the Sick might receive some benefit by the position of his Body, *viz.* if it were such, as that the Heat might not at all be encreased

sed by things that cover'd him (which could not be avoided if he were kept continually in Bed) nor the force of the Blood tending to the Head promoted; for thereby the Heat of the Brain would be encreased, and consequently the Animal Spirits heated and exagitated, whereby the beating of the Heart would be more violent, and the Fever encreased.

But how beneficial soever it is in all Fevers that partake of a great Inflammation to keep the Patient from Bed for some time, yet it must be noted, that if they are kept up too long at once, especially at the Declination of the Disease, they are apt to have wandering Pains, which may end in a *Rheumatism*; and sometimes the Superficies of the Body is seized with the *Jaundice*. If these things happen, the Sick must be put to Bed, that the Pores being opened, such Particles may be carried off, as occasion either of these Diseases: But the Sick must be kept in Bed only a Day or two, and Sweat must not be provoked: But these Accidents are very rare, and never come but at the declination of the Fever, at which time the Disease being abated, it is much safer to permit the Sick to lie continually in Bed, than either at the Beginning or State; for at this time it does more good in digesting the febrile Matter, which if the Sick be confined to his Bed too soon, will be more intraged and fixed.

If any one should here object, that this Method, tho' it be proper enough to refresh the Sick, and to hinder the Fever's seizing the Head, yet it is not convenient, because it stops the Evacuation by Sweat, whereby the febrile Matter now concocted should be ejected. I answer, That the Opponent says nothing to the purpose, unless he can produce Arguments to prove, that such an Evacuation is necessary in Fevers, which is not easie for him to do; for Experience teaches, not Reason, what kind of Fever is to be cured by Sweats, and which by Purging, and the like: yea, we may suppose, that there are some sorts of Fevers, which Nature cures by a peculiar Method of her own, without any visible Evacuation, viz by reducing and assimilating the Morbifick Matter to the Mass of Blood, wherewith it did not so well agree; for which reason I have often, as well in this kind of Fevers as in others, if they were not intermittent, reduced them to order.

der presently at their beginning, before the whole Blood was infected, by ordering only Small-beer to be drank at leisure, and by forbidding the use of Broths of any kind, permitting in the mean while accustomed exercise, and the free Air, without so much as once using any Evacuation. Truly I have cured my Children and Friends only by fasting two or three days: But this Remedy must be used only in young People, and such as are of a sanguine Temperament.

But if we should grant, that Nature could not overcome the Disease by any other Method than by Sweats, it must be understood such Sweats that come at the latter end of the Disease, and after previous digestion, but not those that are forced out on the first days of the Disease, which proceed from the interrupted Oeconomy of raging Nature; I suppose such Sweats are not to be promoted, but the Tumult from whence they arise is to be quelled. But such kind of Sweats are wont to accompany many Fevers, though not all; yet I know very well, that some sorts of Fevers naturally require this kind of critical Sweat at their declination; such are particular Fits of Agues, also the greatest and most frequent Fever of Nature proceeding from that Constitution which wholly favours the Epidemick Production of Agues: For these, if any Method be insisted on, which does not tend first to the digestion of the Morbifick Matter, and afterwards to the ejecting of it by Sweat, the Disease will be encreased; wherefore no Evacuation ought to have place here, only as they suppress the violence of the Disease at first, lest the Sick die of the Physick. Moreover, the cause of a Pestilential Fever, which is very thin and subtle, may be carried off by Sweat on the first days of the Disease, as Experience every where testifies.

But in these Fevers, if they are permitted to follow the ordinary Course of Symptoms, and their own Genius, we never see that Nature is wont to evacuate the Morbifick Matter, now prepared at an appointed time. I think he is therefore very rash that goes about to force the Disease by provoking Sweat, and to cure the Patient by that Method alone; whereas the divine old Man says, *That 'tis in vain to do any thing contrary to Nature's Inclination*. I think this ought to be taken notice of in this particular Fever, of which we now treat, which by frequent Experience

rience I know may be cured without Sweat, and that the Patient when we endeavour unseasonably to force it, is often brought into great danger, without any necessity, from the Morbifick Matter translated to the Head. But neither in this Fever, nor in any other, even in those which are not wont to go off by critical Sweats, if perchance a Sweat of this kind comes of its own accord, when the Disease is abating, which we suppose, by the Remission of all the Symptoms, and proceeds from a due Concoction, no prudent Physician will condemn it; but when it does not come of it self, how can we certainly tell that we may not kill the Man, whilst we endeavour to dispose the Humours to Sweat by a hot Regimen, and hot Cordials? If any one by chance stumbles upon a Treasure, he would be a Fool if he should not stoop down and take it up; but he must be accounted a Fool, who having once light on such a good Fortune, should spend all his time, and hazard his Life in seeking for such another Booty: But howsoever it be, it is clear to me, that the Fever alone has heat enough of it self; nor needs it any greater heat from abroad, by an hot Regimen, to prepare the febrile Matter for Concoction.

I have found that the foresaid Method, by bleeding, and Glysters, has been excellently successful in the Cure of this Fever; but that when it was provok'd by Diaphoreticks, it had not only irregular Symptoms, but the end was always doubtful. Among the Symptoms was that tacit Delirium, which did not shew it self so much by talking wildly, as by a Stupor like a Coma; which, as we said, frequently happened in this Fever. This Symptom, (though sometimes I have seen it come of its own accord) is most commonly occasioned by the over-officioulness of Nurses provoking Sweat; for by this means the morbifick Matter, which refuses to yield in this kind of Fever to Sweats, is violently exagitated, and at length elevated to the head, to the great hazard of the Sick.

I heretofore mentioned in the Cure of a Fever of another Constitution, that in the last Years of it such a kind of Stupor now and then invaded Children especially, and Striplings; but it was not so much, nor altogether so Epidemick, as was that which accompanied this Fever; and I could neither tame this nor that, though I did all I could

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by bleeding repeated, not only in the Arms, but also in the Neck and Feet by Blistering-Plaisters, Cupping-Glasses, Glysters, Diaphoreticks of all kinds, and the like. At length I resolved, after Bleeding in the Arm, and the applying of a Blister in the Neck, and the injecting of two or three Glysters of Milk and Sugar on the first days of the Disease, to do nothing else, only I forbid Flesh, and all spirituous Liquors. In the mean while I attended on Nature's Method; and following her Footsteps, at length I learned how to conquer this Symptom, for the Disease went off safely, though slowly; therefore I thought I must persist in this Method in all the Fevers, which afterwards I had to do with; which indeed seems to me of great moment, if we respect the greatness of the Symptom, and the event which is always good: And truly I sometimes thought that we could scarce proceed too slowly in driving away Diseases; and that we should proceed slowly, more being very often to be left to Nature than is now generally to be imagined: For he is much in the wrong, who thinks that Nature always wants the help of Art; for if so, she would take less care of Mankind than the preservation of the Species requires. For there is no manner of proportion betwixt the multitude of Diseases, and the ways of Cure, which have been used even in those Ages, wherein the Medical Art has been most cultivated; what may be done in other Diseases I know not, but I am sure that in this Fever, whereof we now treat, the said Symptom, notwithstanding general Evacuations, I mean Bleeding and Glysters, was conquer'd successfully by time alone.

We said before, that the Signs of recovery were most commonly deferr'd to the thirteenth day, viz. when the Stupor was much, and when the sick was sometimes speechless; afterwards he earnestly desired some odd or absurd sort of Meat or Drink, the ferment of the Stomach being much vitiated by the continuance of the Disease: In this Case, though the weakness of the Patient required such things as would strengthen him, yet I willingly allowed those things that were not so proper for him if they pleased the Palate.

In September 1674, I visited the Son of Mr. Nott, a Bookseller, being about nine Years of Age; he had this Fever, and the Symptoms now mentioned; having blooded

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him in the Arm, and injected Glysters for the first day of the Disease, I would not comply with the importunity of the Mother, who earnestly urged, that I would hasten the business, which I thought I could not do with safety: Therefore, having gained a truce, I ordered nothing but a common Julep to please the Mother; and when on the thirtieth day he began to recover, he earnestly desired several odd things, and for that reason they were permitted, though otherwise they ought not to have been allowed.

But though this Stupor of the nature of a Coma was more frequent in this *Fever* than other Symptoms; yet sometimes, tho' rarely, a Frensie without Stupor invaded some, and the Sick lay awake Night and Day, and could be govern'd by no means; and there were other Symptoms like those which molested such as are Frentick in other *Fevers*, and in the *Small-Pox*. This Symptom would not bear a Truce as the Comatose Symptom now mentioned was wont to do, till digestion was made, but kill'd the Patient in a few days, unless the inflammation was restrained; and in this Case Spirit of Vitriol did better than other things, which after Bleeding and the injection of a Glyster or two, I ordered to be dropped into Small-beer for the ordinary drink, and in few days it disposed the Sick to rest, having conquered the Symptoms, and cured the Patient, which indeed I was not able to do by any other Method; and this was manifest to me by repeated Experience.

In Autumn 1675. Dysenterick Stools, and sometimes a Looseness came upon this *Fever*: I presently found that these were Symptoms of the *Fever*, and not original Diseases, as in the preceding Constitution; and yet notwithstanding, seeing the cause of the Disease was contained in the Mass of Blood, bleeding was indicated, which indeed, a Narcotick being given twice after it, was able to quell this Symptom.

In September 75, Mrs. Conysby, dwelling near the *Mews*, sent for me: She was seized with this *Fever*, and suddenly with Gripes, and afterwards with bloody and slimy Stools; though she was much weakned by the continuance of the Disease, especially by frequent Stools, wherewith she was tired the foregoing Night; yet I ordered her to be blooded
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in the Arm, and a little while after I gave her a Narcotick; afterwards, that very night, the Stools became thick; and the next morning and evening I repeated the said Narcotick, having also order'd a moderate Cordial to refresh her Spirits; and by this means she presently recovered.

As to the Looseness, which happened often to this Fever about this time of the Year, it did not cause much trouble; and because it did neither good nor harm, so far as I could perceive whether there was a Stupor or whether there was none, I could not take any curative Indication from it; if it did not exceed the Bounds, so as the Patient's Life was not endangered thereby; if it did, an Anodyne was certainly indicated; and for this reason only the use of Anodynes was to be approved through the whole course of this Disease: For the great Propension in this Fever to a Stupor was encreased thereby; and therefore unless there was absolute necessity, they were never to be used.

It is to be noted, that often in this Fever, and in others, those that recovered, especially such as had been much wasted by them, and required long and great Evacuations for their Cure (especially if they were of a weak Constitution) as they lay in their Beds a Nights, first grew hot, and afterwards sweat much, and so were much weaken'd; and for this reason recovered difficultly, and some fell into a Consumption. I perceived this Symptom proceeded only from the Blood impoverished and weakened by the continuance of the Disease, so that it could not assimilate the Juices newly taken in, but endeavoured to eject them by Sweat; wherefore I ordered that they should take three or four Spoonfuls of old Malaga Wine, Morning and Evening, by the use whereof they recovered strength, and Sweats went off. And so much for the continual Fever of this Constitution, which by reason of the great Stupor which most commonly accompanied it, I call *Catalepsy*.

C H A P. III.

Of the Measles of the Year 1674.

AT the beginning of the Year, in *January* 1674, a sort of *Measles* broke out, which were different from those that invaded in the same Month in the Year 1670. and were as Epidemical as they, but not so regular; nor did they so constantly keep their Types; for they came out sometimes sooner, sometimes later; whereas the Eruption of the other sort was always on the fourth Day, reckoning from the first Invasion. Moreover they first possest themselves of the Shoulders and other parts of the Trunk, whereas the other first began in the Face, and crept by degrees over the rest of the Body: Nor could I observe but very rarely those Scales of Skin, like Bran sprinkled, when the Measles went off, which was as certainly seen in the other sort as after a Scarlet-Fever; and besides, they were more Mortal than the former, when they were unskillfully managed; for the Fever and difficulty of breathing that used to follow the Measles were more violent, and more like a *Peripneumonia*, than in the other kind. Though these Measles were irregular as to the Symptoms now mentioned, yet in the general, the description that we made of those in the Year 1670, well enough agreed with these; and therefore it is needless to repeat the same here. These, as the former, encreased till the Vernal Equinox, and then decreasing, vanished at the approach of the Summer Solstice, or soon after.

Seeing the Method of Cure was scarce any whit different from that which I have handled already in the History of the Measles, to which I refer you: I will mention only one Observation (according to my Custom) of the Method I use in this sort of Measles.

The most virtuous Countess of Salisbury sent for me in February 74; to one of her Children, which was then sick, and presently the rest (they were five or six.) I used the

the same Method to them all. I ordered them to keep their Beds two or three Days before the Eruption, that the Blood, according to its own Genius, might cast out through the Pores the Particles that were easily separated, which occasioned the Disease; but I did not permit that they should have any more Cloaths on, or Fire, than they used to have when they were well: I forbade the eating of Flesh, and allowed them Oat-meal and Barley-broths, and now and then a roasted Apple, and for their Drink Small-beer, and Milk boyled with three Parts of Water; and when the Cough was troublesome, as was usual, I prescribed a Pectoral Pissan to be taken often: They recovered with this Method in the short time this Disease is wont to finish its Course; nor were they troubled through the whole course of this Disease, nor when it went off, with any other Symptom than what is frequent in this Disease,

In the first two Months that this sort of Measles appear'd, a Measly Fever here and there intervened, in which some Pimples broke out in the Trunk of the Body, especially in the Neck and Shoulders, like the Measles, but they were distinguished from them, because they did but seize the whole, being confined to those Parts we now mentioned.

But the Fever, tho' it was plainly of the same kind was more violent, and continued fourteen Days, and sometimes longer; it neither bore Glysters, nor Bleeding, being enraged by both; but the Method for the Measles agreed with it. And so much for the Measles.

CHAP. IV.

Of the irregular Small-Pox in the Years

1674. 75.

AS the Epidemical Measles breaking out in the beginning of the Year 70, introduced the black Small-Pox, which we described then; so these, which were no

less Epidemical in the Year 74, ushered in this sort of Pox, so like the other, that they seemed to be the same revived, not a new sort: For whereas, as was said, in the former sort of the *Small-Pox*, after the first two Years, the Pusles were daily less black, and they grew bigger by degrees, till the end of the Year 73, and then the Disease, that was gentle and favourable for such a sort of Pox, returned again with its former violence, accompanied with an unlucky Train of ill Symptoms; for the Pusles were as black as Soot when they fluxed. The Patient did not die till they came to maturity, for before they were ripe they were only of a brown colour, and if they were numerous, they were very small; for when they were very few, they were no less than in other sorts of Pox, and seldom black. In a Word, they were very like those we described in the Year 70, yet they differed from them in some few things, which truly discovered a greater Putrefaction in these than in the other, and that they were of a more gross Nature, and harder to be concocted; for when they were ripe they stunk worse, so that I could scarce come near those that had them much, by reason of the stink, and they were slower in finishing their Course than any sort that I have yet seen.

It's worth while to note, that the milder the sort is, the sooner the Pusles come to maturity, and the sooner the Disease goes off; so in the regular sort of *Flux-Pox*, which began in the Year 67, the eleventh day was most dangerous, which being once past, the Patient was most commonly free from danger: in the next sort of *Flux-Pox*, which were irregular, and began in the Year 70, the Patient was in greatest danger on the 14th day, or at farthest on the 17th, and if he survived these he was safe; for I never knew any one die of this Disease after that day: But in this sort of *Flux*, the Patient died after the twentieth Day, and sometimes if he recovered, which very few did, his Legs did not only swell, which is common in all sorts of *Flux-Pox*, but also the Arms, Shoulders, Thighs, and other parts, which tumours began their Tragedy with intolerable Pain like a Rheumatism, and afterwards commonly suppurated, and ended in cavernous Ulcers, and Imposthumes of the Muscular parts, so that the Patient was in danger on his Life many days after the *Small-*

Pox was off, whereby I clearly perceived by what degrees this Epidemick Disease advanced through these three Constitutions, whereof the latter was always worse than the former, as to the greater putrifaction, and by reason the matter was harder to be concocted.

But the *Small-Pox* whereof we now treat, seem to be a new Species springing from the former waxing old; for though according to the disposition of the Air, producing this Epidemick, the black *Small-Pox*, which first broke out in the Year 70, came to their declination, yet like the relapse of a Disease occasioned by the old matter fermenting afresh, the Air being again disposed for the production of the *Small-Pox*, fetched them from the old Store; which Disease being renewed, and having got Strength again, plainly revived, and as it were grew young: And these were so much the more irregular, and had so much the more intense putrifaction, by how much the matter from whence they were generated was grosser and more feculent, than that from which the former took their rise. Now that this may be more apparent, we must by no means think that it is necessary to suppose such a kind of disposition in the Air, which should produce such an Epidemick in this place, and another very different in another not far distant: For if it should be so, and so it is sometimes, every motion of the Wind would be able to scatter a Constitution. But it seems more probable to me, that this or that particular tract of Air is filled with Effluvia's proceeding from some mineral fermentation, which contaminating the Air, they pass through with Particles destructive, sometimes to one sort of Animals, sometimes to another, and they so long propagate Diseases appropriated to the various affections of the Earth, till that subterraneous Minera of Vapours is expired, which may likewise ferment afresh from the reliques of the old matter, as in the case now mentioned; but it is all one to me, who do not pretend to any thing more, than what is clear from the thing it self, whether this or any other Hypothesis best solves the *Phænomena*; this at least I know, that the *Small-Pox*, which I now treat of, were very like those of the preceding Constitution, only they seemed to be of a more gross Nature, and of a much more intense putrifaction: For which two Reasons, when they floured very much, they destroyed more than any of that sort I ever knew, and in my opinion they were as

mortal as the Plague it self, for the number of the Sick, though when they were distinct, they were not more dangerous than any other sort whatever, and they discovered themselves to be favourable by the largeness of their Pustles, their colour, and other good Circumstances.

As to the Cure, I have long wonder'd at those quite contrary Indications, which this Disease seemed to hint; for it was very manifest, that the Symptoms that proceed from too great an Inflammation were immediately occasioned by a hot Regimen, as a Fever, Frensie, Purple-spots, and the like, to which this Disease is inclined above all others; and on the contrary, too cold a Regimen hinders the swelling of the Face and Hands, which was very necessary, and rendred the Pustles more flaccid: After I had a long time carefully thought on these things, at last I found, I could prevent both these Inconveniences at one and the same time; for by allowing a free use of the Milk-water, small Beer, and such Liquors, it was in my power to bridle the rage of the Blood, and on the contrary, I could promote the elevation of the Pustles, and the swelling of the Hands and Face by keeping the Patient continually in Bed, and by the gentle heat thereof, not suffering him to put out his Arms: Nor does this method contradict it self; for it is to be supposed, that after this Eruption is finished, the Blood has cast out the inflamed Particles to the habit of the Body, and that it wants no provocative to a farther secretion of the matter; so that now, whereas the chief business is performed in the habit of the Body, and in ripening the Pustles, this is only to be minded, to wit, that it be sufficiently defended from those hot Vapours, that may chance to be struck in, by reason the Skin is crusted with the Pustles: But as to the Pustles, they are to be brought to maturity by the gentle heat of the external parts. Now though this Method succeeded well in other Flux-Pox, as I said before, yet it failed me in these of this Constitution, so that most of those died that were very full, whether they used my method, or an hot Regimen and Cordials; and therefore I was very sensible that there was yet something wanting besides those things that bridled the Ebullition of the Blood, or promoted the elevation of the Pustles, and the swelling of the Face and Hands; to wit. something that might be able to conquer the Putrefaction, which

which is more intense in this sort, than in any other I have observed; at length I thought of Spirit of Vitriol, which, I supposed, would resist the Putrefaction, and tame the rage of the Blood; wherefore, leaving the Patient to himself, till the pain and vomiting which preceded the Eruption, were over, and till all the *Small-Pox* were fully come out, at length on the fifth or sixth day, I prescribed the forelaid Spirit to be dropped into Small-beer, which being made a little acid with it, was to be drank as often as he list, for his ordinary drink, but more freely, when the *Fever* of Maturation approached. I ordered this Drink to be used daily till the Patient was perfectly well.

This Spirit, as if it had been truly Specifick in this Disease, wonderfully asswaged all the Symptoms; the Face swelled sooner, and much higher, the spaces between the Pustles came nearer a red Colour, and were like a Damask Rose, the very little Pustles grew as large as this sort would permit; and whereas they used to be black, now they cast forth a yellow Matter, in colour like a Honey-comb, and the Face, instead of being black, was of a deep yellow Colour; they ripened sooner, and finished their whole course a day or two sooner than they used to do. All things were exactly so, if they drank freely of this Liquor; therefore as soon as I perceived the Patient did not drink enough to quell the Symptoms, I mixed the Spirits with a Spoonful of Syrup, or with some distilled Waters and Syrup, and gave it him now and then, that by this means I might compensate his too sparing use of the Liquor.

I have now reckoned up the many Virtues of this Medicine, and truly I never found the least inconvenience in the use of it: Although it most commonly stop'd the Salivation the tenth or eleventh day, yet at the same time some Stools were wont to supply its place, and there was less danger from these than from that. And whereas I have often mentioned, that they which have the *Flux-Pox* are therefore chiefly in danger, because the Spittle, being more viscid on those days, is like to choak the Patient; the Looseness prevents this Symptom, and either goes off of it self, or is easily cured by the Milk-water, and a Narcotick, when there is no more danger from the *Small-Pox*.

Though

Though I ordered the Patient to lye a Bed, and to keep his Arms in, yet I would by no means permit that he should have more Cloaths on him than he used to have; and I allowed him the liberty of moving from one part of the Bed to the other as oft as he would, to prevent Sweating, to which he was very prone, notwithstanding this Remedy. He eat Oat-meal and Barley-broth, and sometimes a roasted Apple; and at the latter end of the Disease, if he were weak or sick in his Stomack, he drank three or four spoonfuls of Canary-Sack, and took a Paregorick Draught every Evening, after the sixth or seventh day, if he were full grown (for Children had no occasion of it) so wit, I prescribed fourteen drops of *Liquid Laudanum* in Cowslip-water. I permitted the Patient to rise on the fourteenth day, and on the one and twentieth day I let him blood in the Arm, and purged him twice, after which he had a better colour, and look'd brisker than those are wont to do that this Disease has so severely handled. Besides, this Method most commonly prevented those Scars that use to disfigure the Face, which are occasioned by raging hot Humours that corrode the Skin.

On the 26th of July 1674, the worthy Mr. *Elliott*, one of the Grooms of the King's Bed-chamber, committed to my care one of his Domesticks, who had this cruel sort of black *Flux-Pox* coming out; he was about eighteen Years old, of a very sanguine Complexion, and was seized with this Disease presently after hard drinking; the Pustles fluxed more than ever I knew any, so that there was scarce any space between them, and I, confiding in the Strength of this excellent Medicine, did not let him Blood, though I was called in early enough to have done it; and, indeed, I ought to have bled him, because this Disease was occasioned by excessive drinking of Wine. After the Eruption was finished, on the fifth or sixth day, I order'd Spirit of Vitriol to be drop'd into some Stone-Bottles full of small Beer; and this he was to use as often as he would for his ordinary Drink. On the eighth day he bled so much at the Nose, that the Nurse being terrified by this Symptom, sent hastily for me: As soon as I came, I perceived this was occasion'd by the immoderate heat and unusual force of the Blood; therefore I ordered him to drink a greater quantity of small Beer impregnated with the foetid Spi-

rit; whereby the Hemorrhage was immediately stop'd; he spit very plentifully, and the swelling of his Face and Hands, and the Pustles proceeded very well. The Disease dispatched its business well enough, only at last some slimy and bloody Stools were somewhat troublesome, which perhaps had not happened if I had let him bleed when I was first called, for the reason above-mention'd; yet I used no other Medicine for the cure of the *Bloody-Flux*, but the Narcotick, which otherwise I should have ordered every night, if the Symptom had not happened, whereby its force being abated till the Pustles went off, afterwards he soon recovered by the taking away a large quantity of Blood from his Arm, and by drinking freely Milk and Water.

About the same time my Neighbour, Mr. *Clinch*, sent for me to two of his Children; one was four Years of Age, and the other suck'd, and was not then half a Year old: In both the Pustles were very small, and fluxed mightily. They appeared first like an *Erysipelas*, and were of the black sort. I ordered Spirit of Vitriol to be drop'd into all their Drink, which, notwithstanding their tender Age, they drank without any aversion; and having no worse Symptom, they presently recovered. My very good Friend, Dr. *Mapletoft*, went with me to visit them; he found the eldest upon recovery, and the younger was then sick of them in the Cradle.

It is to be noted, That as the *Small-Pox* of this Constitution which did not flux were very favourable, so had they no need of the Remedy now prescribed; but it was sufficient that they were treated according to the Method of the distinct *Small-Pox* above-mention'd.

And now, Reader, I have given you a particular account of the *Small-Pox*, which though perhaps every one will condemn according to the Humour of the Age, yet it has not cost me a little Care and Pains for these many Years together to collect these Observations; and I had not published them now, if Charity towards my Neighbour, and a design of doing good to others, had not weighed more with me than the esteem of my own Reputation, which I verily believe will be prejudiced on the account of the novelty of the Subject. And yet I cannot see why any Man should dislike a new Method of curing a Disease not

to be found in the Writings of *Hippocrates*, or *Galen*, unless perchance some place be puzzled by a more difficult Construction; whereas the Cures adapted by the modern Physicians, being not instituted by those two great Luminaries of Physick, are commonly neglected by some, and esteemed by others. And for the same reason it ought not to seem strange, if I have alter'd something in that Method, whereby those *Fevers* are to be cured, which depend on such Constitutions which are Epidemical for the *Small-Pox*: For if in the first Ages of the World the *Small-Pox*, never appeared any where, it follows also, that such *Fevers* were never any where.

But it is most probable there was no *Small-Pox* at that time; for if this Disease had been as frequent in old times as it is now, I believe it would scarce have been unknown to the most skilful *Hippocrates*, who better understood, and more accurately described the History of Diseases, than any one that came after him; and he would also, according to his custom, have left us an exact and natural Description of this Disease. Wherefore I conjecture, that Diseases have certain Periods according to the occult and unaccountable alterations which happen in the Bowels of the Earth; to wit, according to the various Age and Duration of the same. And as there have been other Diseases heretofore, which are either now utterly extinct, or at least, being almost wasted by Age, fade away, and very rarely appear, (of which sort is a Leprosie, and perhaps some others) so the Diseases which now reign will vanish in time and give place to other kinds, whereof, indeed, we are not able so much as to guess. This may be so, whatever we, who are so short-liv'd, think of it, who are born as it were one day, and die another: Nor are the most ancient Authors, that have written Observations of Diseases, of much longer Age, if they are compared with the beginning of the World.

CHAP. V.

*Of the Epidemick Coughs, with a Pleurisie
and Peripneumonia coming upon them, of
the Year 1675.*

When a pleasant and warm Season, like Summer, held to the end of *October* contrary to Custom, in the Year 1675, a Cold and Moist Season came presently after it, and there were more *Coughs* than ever I knew at any other time, sparing scarce any body of whatever Age or Temperament, seizing whole Families together; nor were they remarkable only for their number, for every Winter there are many, but also upon the account of the danger which they cast those into accidentally that had them: For the Constitution being now, and all the foregoing Autumn, very inclinable to produce the Epidemick Fever above described; and whereas there was no other Epidemick Disease to oppose and obstruct the force of it; these *Coughs* made way for the Fever, and easily turned to it. In the mean while, as the *Coughs* assisted the Constitution in producing the Fever, so the Fever upon this account fell upon the *Pleura* and Lungs, as the Week before the coming of the *Coughs*, it fell upon the Head; which sudden change of the Symptoms gave occasion to some, that were less thinking, to suppose this was an Essential *Pleurisie*, or an Essential *Peripneumonia*, tho' it was the very same that had been all this Constitution; for now, as always before, it began with a Pain in the Head, the Back, and Limbs; which Symptom agreed with every Fever of this Constitution, only the febrile Matter being poured plentifully, by reason of the *Cough*, upon the *Pleura* and Lungs, occasioned by Symptoms agreeable to the said Parts: But the Fever, as far as I could observe, was the same that raged to the very Day the *Coughs* first broke out in. Moreover the Remedies whereby it was easily cured, plainly shewed the same. And tho' the pricking Pain in the Side, the difficulty of breathing, the colour of the Blood taken away, and other Signs common

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in a *Pleurisie*, seemed to shew it was an *Essential Pleurisie*; yet it did not require any other Method than what agreed with the *Fever* of this Constitution, but was very different from that which was proper for a true *Pleurisie*, as will plainly appear from what shall be said hereafter. Moreover, when a *Pleurisie* is an *Essential Disease*, it is wont to come most commonly betwixt Spring and Summer: But this *Disease* came at a quite different time, and is only to be accounted a Symptom proper to the *Fever* of this Year, and the Off-spring of this accidental *Cough*.

But now, that I may proceed rightly to that Method which Experience shews is necessary for the *Coughs* of this Year, and also for those which happen in other Years, if they proceed from the same Causes, we must take notice, that the Effluvia that are wont to be expelled from the Mass of Blood by insensible Transpiration, are cast upon the Lungs, the Pores being suddenly stopp'd by cold, and they presently occasion a *Cough*, and the hot and Excrementitious Exhalations of the Blood being by this means detained, a *Fever* is soon kindled in the Blood, to wit, when there is either so great a quantity of Vapours, that the Lungs cannot expel them, or when by reason of adventitious heat, occasioned either by too hot Medicines, or too hot a Regimen, Oyl is, as it were, added to the Flame, and he that was before too prone to a *Fever*, is now precipitated into it: And whatever the *Stationary Fever* is that reigns that Year, or at that time, this new *Fever* presently turns to, and is of the same Genius; though as yet it retains some Symptoms that proceed from the *Cough*, the Original of it; and therefore it is plain, that we must apply our selves in every *Cough* proceeding from this occasion, not only to it, but also the *Fever*, which so readily comes upon it.

Having laid this Foundation. I endeavour'd to relieve those that were my Patients in the following manner.

If the *Cough* had not yet occasioned a *Fever*, and other Symptoms; which, as we said, most commonly accompanied it, I thought it sufficient to forbid the use of Flesh and all spirituous Liquors; I also order'd, that he should use moderate Exercise, and go into a free Air, and that now and then he should drink a cooling Pectoral Pilsan: These few things were sufficient to tame the *Cough*, and

to prevent the Fever and other Symptoms which usually accompanied it : For as the Blood is so qualified by abstinence from Flesh, and Spirituous Liquors, and with the use of cooling things, that it is not apt to receive febrile Impressions ; so by the use of Exercise, the hot Effluvia of the Blood, which when the Pores of the Body are stopp'd with sudden cold, turn in, and cause a Cough, are conveniently exhaled in a way natural and agreeable to them, and so the Patient is relieved.

As to quieting the Cough, it is not safe to use Narcotick and Anodyne Medicines ; nor is there less danger in endeavouring to remove it by spirituous Liquors and hot Medicines, for both ways the matter of the Cough being intangled and hardened, those Vapours which should pass gently and easily, by Coughing, from the Blood, now being stopp'd, are retained in the Mass of Blood, and cause a Fever there ; and this very often happens very ill to the inconsiderate common People, who while they endeavour to stop the Cough by burnt Brandy, and other Liquors, they occasion a Pleurisy or Peripneumonia ; and by this mad contrivance they make this Disease dangerous, and often deadly, which of its own Nature is small and easily curable ; nor are they less deceived, though they seem to proceed with more reason, who endeavour to expel the cause of the Disease by provoking Sweat : For though we do not deny, that Sweat coming of its own accord expels the Cause of the Disease better than any thing else, yet it is manifest, that when we endeavour to force it we fire the Blood, and kill the Patient that we endeavour to cure.

But sometimes, not only when the Disease is ill managed in the manner described above, but also sometimes of its own accord at the beginning, or a day or two after, especially in delicate and tender People, heat and cold come upon the Cough by turns : they had a Pain of the Head, Back, and Limbs, and they were inclined to sweat, especially at Night : All which Symptoms also most commonly followed the Fever of this Constitution, wheremto was often joyned a Pain in the side, and sometimes as it were, a Constriction and Narrowness of the Lungs, and they breathed difficultly, the Cough was stopp'd, and a violent Fever raged.

So far as I could perceive, the *Fever* and worst Symptoms of it were best cur'd by Bleeding in the Arm, a Blister in the Neck, and by a Glyster daily injected. In the mean while I admonish'd the Patient to keep from Bed some hours every day, and that he should abstain from Flesh, and drink Small-beer and Milk-water, and sometimes a cooling and lenient Ptisan; if after two or three days the Pain of the side was not lessened, but continued violent, I blooded him again the second time, and advised him to persist in the use of Glysters. But as to Glysters it is be noted as well in this as in other *Fevers*, they are not to be continually and long used, when the Disease abates, especially in Hysterick Women, and Hypochondriack Men, for the Blood and Humours of such are easily changed, and soon exagitated and heated, and so the Oeconomy of the Body is disturbed, and the febrile Symptoms vex the Sick longer than is usual.

But to return to the business. While by this means time was allowed the Disease, whereby the Blood might leisurely shake off those hot Particles which fell upon the Lungs and *Pleura*, all the Symptoms were wont to go off easily, whereas when the Disease was stormed in a War-like manner by a great force of Remedies, the Sick was either kill'd, or his life was at least redeemed by Bleeding oftner repeated than either the Genius of the Disease required, or indeed would bear: For whereas in a true *Pleurisic*, Bleeding repeated did the business, and was alone sufficient for the Cure, (if hot Medicines, and a hot Regimen did not hinder;) on the contrary, in this Symptom it was sufficient to Bleed once, or at most twice, if the Sick rise, and used cooling Liquors; for there was no necessity, as far as I could observe, to bleed oftner, unless the said Symptom was much heightened by heat coming from abroad, nor in this case only without danger.

Upon this occasion I would speak a few things of this, viz. That it is commonly said, that a *Pleurisic* is sometimes malignant, and that then it will not bear Bleeding, at least not so often as this Disease commonly requires. I think indeed, that a true and Essential *Pleurisic*, which, as will be said hereafter, comes indifferently in all Constitutions of all Years, does always indicate repeated bleeding; yet at sometimes it happens that a *Fever* properly Epidemick,

mick, by reason of a sudden alteration of the manifest Qualities of the Air, freely puts off the morbidick Matter upon the *Pleura* or Lungs, and yet the *Fever* remains wholly the same. In this Case, although Bleeding may be allowed, that the Symptom, if it rage much, may be abated; yet, generally speaking, more Blood ought not to be drawn upon the Account of the Symptom than the *Fever* requires on which the Symptom depends: For if the *Fever* be of that Nature, that it does not abhor repeated Bleeding, it may be repeated in a *Pleurisie*, which is the Symptom of it. But if the *Fever* will not bear repeated Bleeding, it will do no good; yea, it will do hurt in the *Pleurisie*, which stands and falls with the *Fever*. In this manner, in my opinion, was the Symptomatical *Pleurisie*, which accompanied the *Fever* that raged in this Place at the time the Coughs began, viz. in Winter, in the Year 1675, and therefore I must acquaint you, that I think he moves very uncertainly, that has not in the cure of *Fevers* always before his Eyes the Constitution of the Year, as it favours the producing epidemically this or that Disease, and all the other Diseases that concur, and are form'd into the likeness and similitude of it.

In November, in the foresaid Year, Mr. Thomas Windham, the eldest Son of Sir Francis Windham, was my Patient; in this *Fever* he complained of a Pain in his Side and other Symptoms wherewith others were afflicted that had this Disease; I bled him once, and applied a Blister to his Neck; Glysters were daily injected, and he drank cooling Ptilans and Emulsions, and sometimes Milk-water or Small beer, and I advised that he should keep from Bed for some hours; and by this Method he recovered within a few Days, and Purging being used, he was quite well.

But it is to be noted, that though these Symptoms which were wont to come upon the Cough, were most commonly those which were troublesome this Winter, yet the Cough invading alone without them, reigned chiefly at that Season. The Cure of it did not require either Bleeding or Glysters, if a *Fever* was not raised by a hot Regimen and hot Medicines; for the forbidding of Flesh and Wine, and such spirituous Liquors which are apt to occasion a *Fever*, and the ordering the Sick to go abroad into the open Air,

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was sufficient to quiet it. Moreover, I order'd the following Lozenges to be taken often, which indeed are the best I ever knew to stop Coughs which are occasioned by taking cold.

Take of Sugar-candy two Pounds and an half, boyl it in a sufficient quantity of common Water, till it sticks to the fingers; and then add of the Powder of Liquorish, Elecampene, the Seeds of anise and Angelica, of each half an Ounce, of the Powders of Orris, and of Flowers of Sulphur, each two Drams; of the Glymical Oyl of the Seeds of Anise two Scruples: Make Tablets according to Art, which let him always carry in his Pocket, and take one of them often.

But before I make an end of this Discourse concerning Epidemick Diseases, I must answer an Objection, which I foresee will be urged against some of it, viz. That it does not sufficiently provide against that Malignity, which is in most of those Diseases. I neither can, nor will endeavour to vitiate the Opinion received of Learned Men of all Ages concerning Malignity; for it manifestly appears in most Epidemick Diseases; I only desire to propose what I think concerning the nature of it, that my Practise may not seem disagreeable to Reason; for I, according to the Learned Scaliger, will be governed by Reason.

*Non mihi sed ratione, aut qua ratio esse videtur
Miles; ferreus quid mordicus hic tenet, aut hic.*

Therefore I think that all that Malignity which is in Epidemicks (whatever the specific Nature of it be) consists and ends in very hot and spirituous Particles, which are more or less contrary to the nature of the Humours contained in the Humane Bodies; because only such Particles can so soon alter the Humours, as we see they are in malignant Diseases. I think also, that these hot and spirituous Particles endeavour chiefly to assimilate; because, according to the Law of Nature, every active Principle is busied in creating its like, and in turning and accommodating whatever is contrary to its

its own Genius; so Fire generates Fire, and one infected with a malignant Disease infects another by an emission of Spirits, which presently assimilate the Humours to be infected to themselves, and pervert them to their own Nature.

These things being premised, it follows, that nothing is better than to eject the Particles by Sweat; for by this means the Disease may seem to be presently rooted out. But this Experience contradicts, and teaches, that it cannot be done in every sort of malignity. For though in the *Plague*, the pestilential Particles, both because they are subtle, and also because they reside chiefly in the spirituous part of the Blood, may be dissipated and ejected by an uninterrupted Sweat; yet in other Fevers, where the assimilating Particles are not so subtle, and are incorporated with grosser Humours, the malignant *Mixers* cannot only not be carried off by Sweat, but is very often encreased by those sudorifick Medicines whereby it is sollicitated; for the more these hot and spirituous Particles are moved by the use of hot things, the more the assimilating Faculty which they have is encreased; and the more those Humours are heated whereon they act, the more freely are they assimilated, and yield to the Impressions of them; whereas on the contrary, Reason seems to dictate, that those Medicines which are of a contrary Nature, do not only suppress the violence of the hot and acrid Particles, but also condense and strengthen the Humours; so as that they may sustain the force of the morbidick Spirits, or conquer them; and Experience, my Mistress, vouches that the Purple Spots of Fevers, and the black Pustles of the *Small-Pox* more readily encrease when the Patient is heated; and that they, according to the degree of the moderate Regimen, which is very agreeable to them, are wont to decrease and be lessened.

Now if any one should ask me how it comes to pass, that seeing malignity consists of hot and spirituous Particles, there should be very often such manifest Signs of a Fever, even in Diseases that are highly malignant. I Answer, first, it plainly appears in the chief and most notable instance of malignity, the *Plague*, that the morbidick Particles are so very subtle and fine, especially when it begins, that, like the Air, it passes the Blood, and kills the Spirits before

it can raise an Ebullition; and so the Sick dies without a Fever.

But in that lesser degree of Malignity, which is found in other Epidemics, the febrile Symptoms are so small sometimes, by reason of a confusion raised in the Blood and Humours by the inimical Particles contained in their Bosom, whereby Nature, being as it were oppressed, is not able to produce those regular Symptoms which are suitable to the Disease; but almost all the *Phænomena* are irregular, by reason the Oeconomy is quite subverted; in which case the Fever is often depressed, which, if it could proceed according to its own Genius, should be very high: And sometimes also fewer signs of the Fever shew themselves than the Genius of the Disease requires, by reason of the Translation of the malignant *Materia* upon the *Genus Nervosum*, or upon other Parts of the Body, or upon the Humours, without the Territories of the Blood, whilst the matter occasioning the Disease, should be yet turgent.

But however it be, I cannot so much as guess what other Method of Cure is to be appointed for any malignity besides that which is proper to the Epidemick, to which it belongs. So that whether the Epidemick be of the number of those that require, first Concoction of the febrile matter, and presently after the ejection of it rightly disposed by Sweat, or of those that endeavour to go off by some Eruption, or also of those that require the help of Art to make way for them; I say, in all these kinds the malignity, the Companion of the Disease, will stand and fall with it, keeping pace with it, and going off when it goes, and consequently whatsoever Evacuation agrees with the Fever, the same agrees with the malignity, though the evacuations are contrary to one another; therefore Sweat, which follows Concoction as its effect, will cure that malignity which accompanies Autumnal Agues, and also the continual Fever, which is of the same Nature, also the seasonable ripening of the small Abscesses carries off the malignity in the Small-Pox; and so of the rest; in all which the peculiar sort of malignity is best conquered by those ways and means, whereby those peculiar Diseases to which it belongs are easiest cured, whether by this Method or any other. This Reason dictates, and is every where confirmed by Experience.

C H A P. VI.

The RECAPITULATION.

AND so at length we have shown, that the space of Years wherein the foregoing Observations were collected, produced five sorts of Constitutions, viz. five peculiar Dispositions of the Air, producing so many several Species of Epidemicks, namely Fevers: But the first of these, which reigned in those years wherein Autumnal Agues were most frequent, seemed the only one, according to my Observation, wherein Nature seemed to moderate all the Symptoms, so as to dispose the Febrile matter prepared by due concoction to go off at a certain time, either by a sufficient Sweat, or by large Transpiration, and therefore I call it the Depuratory Fever; and truly I am apt to believe, that this was the chief and primary Fever of Nature, both as to the regular Method she used in promoting the mortifick Matter, and in digesting it at an appointed time; and also because this more frequently occurred, than other Fevers. For it is probable, that intermitting Fevers rage oftner Epidemically than any other Diseases, if we believe those that have wrote so many and such large Treatises in former Ages of the frequency of them, whatever the reason should be, why they have appeared so seldom, since the last Plague in London; for the Pestilential Fever was that Forerunner of all those inflammatory Fevers, which invaded afterwards; and unless I am deceived, all those excellent and necessary Axioms which Hippocrates and other ancient Physicians delivered, were adapted to the primary Fever we have spoken of above, whereby it is so to be governed, that the Febrile matter may be prepared to make a true Crisis by Sweat; but I don't understand how those Aphorisms can be accommodated to those subsequent sorts, that have a different Nature, and are seldom wont to be cured by any such Method: But however this thing be, it is worth notice, that

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whereas this Fever, that depended on that Constitution wherein Intermittents prevailed over the rest (if it continued long, or if the Sick was exhausted by too great evacuations) sometimes turned to an Ague. Those Fevers which raged the following Years, tho' they continued very long, very rarely intermitted, which was a plain sign, that that continual Fever, and those Agues did in some sort agree in their Nature, or were not very much different from one another.

Now if any one should ask me how the species of a continual Fever may be gathered from the Signs delivered by me in the description of Fevers, when for the most part every one of them are intangled with those Symptoms that belong in general to all Fevers, as Heat, Thirst, Restlessness, and the like: I answer, it is difficult, but not plainly impossible; if any one seriously weighs all the Circumstances which I have set down in the foregoing History, especially if he search in some great Town or some other Populous Place; suppose, for Instance, a Physician is called to one that has a continual Fever, he has first this help to inform his Judgment aright, viz. he may either from his own observation, or by others, easily know what other Diseases, besides this Fever, rage Epidemically, in those places, and of what kinds they are; which being known, he need not doubt any more of what kind that Fever is which attends this other raging Epidemick; for tho' it may be so, that the Fever only shews itself by those Symptoms which are common to all Fevers, especially if it be confused and disordered by a method which is quite contrary to the Cure of it; yet, other Epidemics will plainly shew the Characters, that are proper and peculiar to its Nature and Genius; for instance, he that should look upon the Small-Pox, will easily conjecture (if he rightly understand the History of the Disease) the first day the Pustles appear by their bigness and colour, and the like, to what kind of Small-Pox this particular Species is to be referr'd; and when he has once known the sort of Small-Pox which is most in that Year, and in those places, he will plainly understand the Species of any Fever raging at that time, and in those places. And truly, if I had exactly learned the History of Diseases, (which I do not pretend to) having seen any Epidemick,

I should not doubt to declare the kind of Fever then reigning, tho' I never see it; so having seen any Fever, I should easily know what Epidemick Disease accompanied it; the *Small-Pox* for instance, the *Measles*, the *Bloody-Flux* and the like; for some peculiar kind of these, as well as a peculiar Fever, constantly accompanies every particular Constitution. But secondly, besides those signs which the consideration of Epidemics invading together suggests; also the Symptoms of every Fever gives some light for the knowing the Species of it, although, as we mentioned above, Fevers in general have some Symptoms that are common to all, yet there are some certain notes of distinction, which Nature has peculiarly impressed upon each Species: But because they are somewhat obscure, they are perceived only by those that warily and exactly search every thing. Among those distinguishing signs I have always thought, that Sweat, or dryness in this or that time of the Disease, shew'd chiefly the Species, if it were not forced from its Natural State by an improper Method, and this appeared plainly to me in all those Epidemick Fevers those Observations contain: For instance, in those Fevers which raged, while Autumnal Intermittents were decaying, the external parts of the Sick were dry, nor was there the least sign of Sweat, before the Concoction of the fer-
 tile matter, which was most commonly perfected on the fourteenth day; nor could Sweat be provoked without great danger to the Sick, who was presently precipitated into a Frenzy, and other dangerous Symptoms, by forcing Sweat. In the Pefilential Fever which followed this, (which led the Dance of those inflammatories that invaded from that time) no Sweat broke out of its own accord, but it might be raised by Sudorifics, even the first Days of the Disease, and when it was once raised, the Sick was freed of all the Symptoms. In the Fever next succeeding, which accompanied the *Small-Pox* in those Years, wherein they were regular, the Sick was of its own accord subject to violent Sweats at the very beginning of the Disease, but if the Sick indulged them, all the Symptoms were presently increased. In those two Fevers, which accompanied the two irregular kinds of *Small-Pox*, and the *Bloody-Flux*, the Sweat was also irregular; but it most commonly began at the first Day, though the Sweat

which accompanied the first Fever was somewhat larger than that which accompanied the latter; but neither relieved the Sick; for it did not proceed from previous Concoction, but from a confused motion of ill Particles.

It seems very difficult to me to discover the Species of a new Fever the first Year of a Constitution when none have seen any Specimen of it, nor can imagine what Epidemics are to come; which the Fever most commonly fore-runs. It would be troublesome to mention all those things which occurred in those Years of which we have treated, where by it might appear that some not very obscure signs were suggested by Nature, whereby being help'd we were able to do this; and furthermore, this knowledge will necessarily depend on a diligent and accurate observation of all the circumstances: But though it should be difficult, yea, if we should suppose it plainly impossible to distinguish the Species of a new Fever, when it first begins, yet as to the cure, the indication from such things as do good or harm is at least left to us, whereby we may by little and little find a way to secure the Patient, if we do not make too much haste, than which I think there is nothing more injurious; and that such as have had Fevers have been destroyed by it more than any other thing; nor am I ashamed to confess, that more than once I have advised well for my self and Patient in doing nothing, when it was not plain to me what ought to be done; for whilst I waited for an opportunity, the Fever either went off gradually of it self, or was reduced to such a Type as I knew how to cure. But it is a sad thing, that most of the Sick do not understand, that it is as much the part of a skilful Physician sometimes to do nothing, as at other times to give the most effectual Remedies, and so they will not receive the benefit of a just and fair Proceeding, but count them either the effects of Negligence or Ignorance; whereas the most ignorant Quack knows how to add Medicine to Medicine, as well as the most prudent Physician.

And these are in a manner the things which I have hitherto observed, which could not be reduced to any Rule concerning the Species of Epidemick Diseases, in that order wherein they invaded from the Year 61, to the end of the Year 79, at which time the *Small-Pox*, and the continual Fevers, their Companions, which reigned about

two Years, now growing mild, seemed to be now going off; what Diseases will follow, He only knows that knows all things.

S E C T. VI. C H A P. I.

Of the *Intercurrent* F E V E R:

THE Observations of Years, which I have now described, sufficiently argue, that some Fevers are deservedly called Stationary, I mean such as proceed from some particular, and yet not well known, Constitution of this, or another Year. Every one in his order prevails, and rages very much, and is as it were superiour to all the rest, through all that continued Series of Years. Whether other Species besides those that have been now mentioned; and also whether in an exact course of Years one followed the other in a constant Order; or whether it be otherwise, I cannot yet tell. But there are also other continual Fevers, which though they rage sometimes more, sometimes less, yet because they were mixed with all sorts of Stationary Fevers, and themselves in the same Year indifferently; I therefore think they ought to be called *Intercurrents*; and what I have Learned hitherto by observation of their Nature, and of the Method of Cure belonging to them, I will set down in the following Chapters; they are, the Scarlet Fever, Pleurisie, Bassard Peripneumonia, Rheumatism, Erysipelatose Fever, Quinsie, and perhaps some other.

And now, seeing a Fever either as yet accompanies all these Diseases, or at least has accompanied them till it went off by exonerating the febrile Matter according to the Nature of the Disease, upon this or that part, I do not at all doubt, but that the Fever is to be accounted the primary Disease, and the other disorders, from whence the other Diseases most commonly take their Name, are Symptoms, which chiefly respect the manner of the Crisis, or the part to which the force of the Disease rushes. But if the
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thing be agreed upon, I will not contend about Names, though I may give a Disease this or that Name, as I please.

It is to be noted, That as the stationary Fevers whereof we have treated above, were more or less Epidemical, as we said, according as the Constitution of Years, founded upon a secret and inexplicable disposition of the Air favoured them, so these *intercurrents* sometime, though not so frequently as the other, raged Epidemically; For though most commonly they proceeded from this or that particular disorder of particular Bodies, whereby the Blood and Humours were some way vitiated, yet some times they took their rise immediately from some general cause in the Air, disposing Mens Bodies so by the manifest Qualities, that such and such disorders of the Blood and Humours should be generated, as were the immediate Causes of such Epidemick *intercurrents*, as when a violent Frost continuing long, and a good while in the Spring, is suddenly succeeded by a hotter Season, *Pleurisies*, *Quinsies*, and such like Diseases, are wont to invade, whatever is the general Constitution of Years. And because these rage sometimes as much Epidemically as others, therefore to distinguish these from such Fevers, which are determined to a certain Series of Years, we call those that are indifferently common to all Years *intercurrents*.

But how great soever the difference is betwixt these two sorts of Fevers, as to the Causes proceeding from the Air, yet with respect to other external and precatartick Causes, they often agree. To pass by now the Contagion, that sometimes occasions stationary Fevers, and Surfeiting, which occasions both sorts; the evident external Cause of most Fevers is to be sought for hence, viz. because the Sick either left off Cloaths too soon, or after being hot with Exercise, exposed himself unwarily to the Cold; upon which account the Pores being suddenly stop'd, and those Vapours retained, which would otherwise have pass'd through them, this or that sort of Fever is kindled in the Blood; as either the general Constitution, which at that time reigns, or the particular disorder of the Humours is more inclined to this or that sort of Fever; and I verily believe more have died on this account, than by the Plague, Sword, or Famine altogether: For if any Physician shall enquire

enquire strictly of the Sick, concerning the first occasion of their Disease; If it be of the number of those acute Diseases we have treated of above, he will almost always find, that either the Sick rashly left off some Cloaths that he was accusom'd to, or that he expos'd himself suddenly to the cold, when his Body was heated with motion, and that upon one of these accounts he was seized with the Disease; Wherefore I always advise my Friends, that they should never leave off any Cloaths, unless it be a Month before Midsummer, or a Month after; I likewise carefully advise them to avoid cold after being heated with Exercise.

But here it must be noted, That though these Diseases, which I am to treat of under the Title of *Intercurrents*, are most of them, if not all, Essential Diseases, yet often some Disorders resembling these as to their *Phænomena*, and also called by the same Names, come upon those Fevers which I term *Stationary*, and are plainly Symptoms of them; in which Case that Method, which ought to be used when they are Essential Diseases, is not proper, but rather that which the Fever requires, the Symptoms whereof they now are, and for the cure of them, the Method which is peculiar for them must be only lightly touch'd upon; but in general, we must carefully mind the Fever of the Year, and by what way that is easiely cured, whether by Bleeding, Sweating, or any other Method; for if this be neglected we shall often err, to the great hazard of the Patient. If any one should object, that these very Disorders, which I call Essential Diseases, and of which I now treat, are really only Symptoms; To this I answer, That perhaps they may be Symptoms, with respect to the Fevers to which they belong; yet at least they are Symptoms of Fevers which always necessarily produce them: For instance, in an essential *Pleurisie*, the Fever is of that nature, as it always puts off the Morbifick Matter upon the *Pleura*. In an essential *Angina*, it is so disposed as to put off the same upon the Jaws, and so of the rest. When either of the aforesaid Diseases comes upon a Fever, which belong to this or that Constitution of Years, and depends on it only accidentally, and is not necessarily produced, upon this account they are very different one from another. But now, that Essential Diseases, as I call them, may be rightly distinguished

gished from those which are only Symptomatical, it is very necessary for us to consider, that what Symptoms accompany at the invasion of this or that Stationary *Fever*, such always come at the beginning of a *Pleurisie* or a *Quinsie*, when they are only the accidents of such a *Fever*, which was perceived in the forefaid Symptomatick *Pleurisie*, which came upon the *Fever* that raged in the Winter of the Year 1675: For as many as were afflicted with this *Pleurisie* had Pains, when they were seized, in their Heads, Backs, and Limbs, which were the most certain and most common Symptoms of all those *Fevers* which invaded before the *Pleurisies* began, and continued after they went off; whereas when either of these *Intercurrents* were Essential Diseases, they proceeded in the same manner in all Years, having nothing common with the stationary *Fever*, that reigned at that time. Moreover, all the Symptoms which rise afterwards are more conspicuous, when they are not obscured and confounded by the mixture of other *Phænomena*, which are of a different nature, and belong to another *Fever*. Besides, the time of the Year wherein most essential *Intercurrents*, though not all, come, shews often to what kind such a Disease is to be referred. But lastly, he is fittest to find out the Diagnostick of these Diseases, and all others, who by daily and diligent Observation, has search'd thoroughly the *Phænomena* of them, so that upon first sight he knows presently how to distinguish the kind, though perhaps the Characteristick differences of some of them are so subtle and delicate, that they cannot be expressed in Words to another.

But forasmuch as these various kinds of *Fevers*, as far as we can understand, by weighing the *Phænomena* that belong to the Diseases, and to the Method of Cure, owe their Original to some peculiar Inflammation of the Blood that is proper to every Disease, I count the chief business of Cure consists in cooling and qualifying it; and I wholly endeavour to eject the morbidick Matter by such a Method as is agreeable to the Genius of the Disease, and prov'd by Experience to cure the Disease readily. And truly in curing of all *Fevers*, he hits the Mark who certainly knows, by what way the febrile Matter is to be excluded, viz. by Bleeding, Sweating, Purging, or any other more proper way.

CHAP. II.

Of the Scarlet Fever.

THE Scarlet Fever, though it may happen at any time, yet it most commonly comes at the latter end of Summer; at which time it seizes whole Families, but especially Children. At the beginning they shake and shiver as in other Fevers, but they are not very sick; afterwards the Skin is Spotted with small red Spots; they are more frequent, and much larger and redder, but not so uniform as those of the Measles; they continue two or three Days and then vanish: After them some Scales like Bran are sprinkled over the Body, and these Scales come and go successively twice or thrice.

I reckon this Disease is nothing else than a moderate Effervescence of the Blood, occasioned by the heat of the foregoing Summer, or some other way; and therefore I do nothing to hinder the Despumation of the Blood, and the ejecting of the peccant Matter through the Pores of the Skin, which is easily done by the Blood itself; wherefore I forbear Bleeding and the use of Glysters, by which Forms of Remedies, Revulsion being made, I think the offensive Particles are more mixed with the Blood, and the Motion that is more agreeable to Nature is obstructed: And I also on the other hand forbear giving Cordials, by the heat whereof the Blood is more impetuously agitated than is agreeable to that gentle and quiet separation, whereby the whole business is done. Moreover a violent Fever may be occasioned by this means. I think it is sufficient, that the Sick, abstain wholly from Flesh and from all spirituous Liquors whatever, and that he keep always within, but not always a Bed. But when the Scales are quite gone off, and the Symptoms ceased, I think it proper to purge the Sick with some gentle Medicine that is agreeable to his Age and Strength; and by this simple
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and plain natural Method, this Name of a Disease, for it is scarce any thing more, may be easily and safely removed. Whereas on the contrary, if we disturb Nature more, either by keeping the Sick continually in Bed, or by Cordials, and other needless Remedies too Learnedly, and as it commonly appears thrust in above Measure, *Secundum Artem*, the Disease is presently heightened, and the Sick dies by the over-officioulness of his Physician,

But you must take notice, if *Epileptick Convulsions*, or a *Coma* come upon this Disease at the beginning of the Eruption, which sometimes happens to Children and young People that have this Disease, a large and strong Blister must be applyed to the Neck, and a Purgative of *Diarrhoeum* must be presently given, and must be repeated every night till the Patient recovers; and he must be ordered to use for his ordinary Drink Milk boyled with thrice the quantity of Water, and must forbear Flesh.

CHAP. III.

Of a PLEURISIE.

THIS Disease, that is as frequent as any other, comes at any time, but especially betwixt Spring and Summer, for at that time the Blood, heated by the bearns of the Sun, runs violently into Extravagances and inordinate Motions; it chiefly falls upon those that are of a sanguine Constitution and frequently Country People, and those accustomed to hard Labour. It ordinarily begins with a shivering and shivering, and then heat, thirst, restlessness, and other Symptoms of a Fever follow, sufficiently known. After a few hours (though sometimes it is much longer before this Symptom comes) the Patient is taken with a violent pricking Pain in one of his Sides about the Ribs, which sometimes creeps towards the Shoulder blade, sometimes towards the Breast, and sometimes towards the Back; he coughs frequently, which occasions great Pain by Reason of the distention of the Inflamed Parts, so that

that sometimes he holds his Breath to prevent Coughing. The Matter which is spit up at the beginning of the Disease is little and thin, and often mixed with Particles of Blood; but in the Process of the Disease it is more concocted, and also mixed with Blood; the Fever in the mean time keeps the same pace, and is help'd on by those Symptoms that proceed from it; and the said Fever, with all its Concomitants (namely, the Cough, the spitting of Blood, the Pain, and the like) is lessened by degrees, according to the degree of free Expectoration of the morbid Matter. But the Matter occasioning this Disease, does not always in the process of it attain the Concoction that is due to Expectoration; for it frequently happens that the Matter which is spit up is yet little and thin, as at the beginning of the Disease, and consequently the Fever and other Symptoms do not at all remit till they have killed the Patient; and in the mean while he is sometimes bound in his Body; and sometimes too loose, the Stools being frequent and very liquid: It sometimes happens, when the Disease is very violent, and Bleeding has been omitted, the Patient is not able to Cough, but labouring under a great difficulty of breathing, is in a manner suffocated by the violence of the Inflammation, which is sometimes so twice great, that he cannot expand his Breast large enough for Respiration without great pain, and sometimes when this Inflammation is violent, and when Bleeding has not been done, which ought to have been done at the beginning of the Disease, an Empyema is presently occasioned, and the Cavity of the Breast is filled with Matter: In which case, though the Original Fever either wholly ceases, or is at least lessened, yet the Patient is still in danger; for an Empyema, or an *Hebilit* Fever following the poor Mattered Cough is suppurative.

But now, though a *Pleurisie* commonly takes its rise from the proper and specific Inflammation of the Blood, which is wont to produce it when it is an Original Disease, yet it comes sometimes accidentally on other Fevers, of what kind soever they be, from a Precipitation of the foule Matter upon the *Pleura*, or intercostal Muscles; and it happens most commonly at the beginning of the Fever, the Hebrile Matter being as yet crude, and not subdued by a sufficient Ebullition, and so not prepared for a

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due separation by a more convenient way : But it is most commonly occasion'd by an unseasonable and preposterous use of hot Medicines, such as are often given by Gentle-Women : But their Charity would be better bestowed in feeding the Poor than physicking them ; and they do so, forsooth, with design (if they have any at all) to force Sweat at the beginning of the Fever, little thinking of the ill consequence of it ; for Nature, being disturbed by this means, is forced to expel the crude Humour any way ; and so sometimes the force of the febrile Matter falls upon the Meninges of the Brain, and causes a *Phrenie* ; and sometimes upon the Membrane covering the Ribs, and then a *Pleurisie* is occasioned, especially when the Age and Constitution of the Sick, and the Season of the Year, betwixt Spring and Summer, contributes to it ; for at that time Fevers are inclined to turn to *Pleurisies*.

The colour of the Blood taken away by Bleeding, seems to shew, that a *Pleurisie* takes its rise from such a Precipitation as we have mentioned ; for the Blood, at least that which is taken away at the second time, is like melted Suet, and the Superficies like true Pus, and yet in this it is different from it, for it is closely knit with the Fibres, like the other Blood, nor will it run like Pus. For that part of another colour, when it is torn from the rest, is like a tough Skin, and perhaps nothing else than the sanguineous Fibres, which having put off their red and natural Tegument by precipitation, grow into this whitish Membrane by Reason of the cold of the ambient Air. But it is to be noted by the bye, that if the Blood does not flow horizontally with a right Stream from the opened Vein, but runs down upon the Skin perpendicularly, it is often of another colour, how quick soever it runs. But I confess I do not know the Reason of it, nor is the Sick so much eased by this kind of Bleeding as by the other just now mentioned. Yea, when the Blood is taken away after this manner, if the Orifice be too small, or if any thing else obstructs the free Passage, so that it cannot come out with a full Stream, it is not like the Blood of *Pleurisicks*, nor is the Patient so much eased. I have likewise observed, that if the Blood fresh drawn, in what manner soever it flow, be stirred, the Superfice will be of as red and florid a colour as in any other Disease. But how-

ver the Blood be, this Disease, though it has an ill name, and is more dangerous of it self than any other, yet if it be well managed it is easily cured, and indeed as certainly as any other Disease.

Having well considered all the various *Phænomena* of this Disease, I think it nothing else than a *Fever* occasioned by a proper and peculiar Inflammation of the Blood, whereby Nature puts off the peccant Matter upon the *Pleura*, and sometimes on the Lungs, and so it causes a *Peripneumonia*, which I think differs only from a *Pleurisie* in degree, and according to the greater height and longer extent of the same Cause.

Therefore I propose this Method for the Cure of it, namely, That the Inflammation of the Blood be suppressed, and that the inflamed Particles of it, which have violently rushed upon the *Pleura*, and inflamed it, be duly evacuated; wherefore depending most upon Bleeding, I order as soon as I am called, that ten Ounces of Blood, or thereabout, be taken away from the Arm of the affected side; and afterwards I prescribe the following Potion to be taken presently after Bleeding.

Take of the Water of red Poppies four Ounces, of Sal-Prunella one Dram, of Syrup of Violets one Ounce; mingle them, and make a Draught.

At the same time I order the following Emulsion.

Take of Sweet Almonds number six, of the Seed of Melons and Pompions, each half an Ounce, of the Seeds of White Poppies two Drams: Beat them together in a Marble Mortar, pouring gently upon them one Pint and a half of Barley-water, of Rose-water two Drams, of Sugar-candy half an Ounce; mingle them, and make an Emulsion; give four Ounces every fourth hour.

I also order Pectorals to be taken inwardly: For instance:

Take of the Pectoral Decoction a Quart, of the Syrups of Violets and Maiden-Hair, each one Ounce and an half; mingle them, and make an Apozem; let him take half a Pint thrice a Day.

Take of Oyl of Sweet-Almonds two Ounces, of Syrup of Violets and Maiden-Hair, each one Ounce, of Sugar-candy half a Dram: mingle them, make a Liniment according to Art, whereof let the Sick lick often in a Day.

Oyl of Almonds by it self, or Oyl of Flax-seeds fresh drawn is often used with good success.

As to the Diet, I forbid all Flesh, and the Breath of it, though it be never so thin; and I order the Patient to eat of Oaten, and Barley-broaths, and Panada, and to drink a Pissan made of Barley-water, with Sorrel-roots and Licorish, and the like, and sometimes Small-beer. Moreover I prescribe the following Ointment.

Take of the Oyl of Sweet-Almonds two Ounces, of the Ointments of Marsh-mallows and Pomatum, each one Ounce; mingle them, make a Liniment, wherewith anoint the Side affected morning and evening, apply upon it a Cabbage Leaf.

I also order he should persist in the use of the said Remedies through the whole course of the Disease. Of the same day I am first called, if the pain is very violent, I take away the same quantity of Blood, or else the day following, and so the third day: And after this manner I repeat Bleeding four times one day after another, (unless the Patient is well before) when the Pain and other Symptoms rage violently. But if the Disease, being more moderate, and less dangerous, permit me to proceed more gently, or if the Patient, being weak, cannot well bear Bleeding repeated in such short distances, I do not repeat it again after it has been twice used, till a day or two be passed between such Bleeding; in which case I always consider the things that contra-indicate, viz. on this side the violence of the Disease, on the other the weakness of the Sick; and though in curing of Diseases, I would always proceed as I thought convenient, so as to order the taking away more or less Blood, according to the occasion; yet I have seldom observed, that a confirmed Pleurisie has been cured in grown People, with less than the loss of forty Ounces of Blood, or thereabout, though in Children once

or twice Bleeding is most commonly sufficient; nor does the Looseness, which sometimes comes upon this Disease, hinder the foreaid repeated Bleeding: For, indeed, it may be soon stop'd by this very Method without any astringent Medicines.

I either quite omit Glysters, or take care that they be injected at as great a distance as may be betwixt the Bleedings, and they should be made only of Milk and Sugar.

During the whole course of the Disease, I take care that the Sick be not over-heated, and therefore I order that he keep from Bed some hours every day, according to his Strength, which is of so great moment in this Disease, that if the Patient be kept in Bed continually, neither this large Evacuation of Blood, nor other Remedies, how cooling soever, will sometimes do any good for taking off the said Symptoms.

Presently after the last Bleeding, unless perchance it happens before, that all the Symptoms abate, and that the Patient (who has been kept hitherto for some days from all spirituous Liquors, and strong Nourishment) soon recovers his Strength, it would be convenient to give a gentle Purge.

But now if any should say, that proceeding in this way we scarce touch upon Expectoration, so far are we from discouraging largely of the ways whereby it is promoted through the several Seasons of this Disease, he is to know that these things were not unwarily passed over, but after good consideration designedly omitted: For I always thought that they were in very great danger, who committed the cure of the Disease to Expectoration; for to say nothing of the tediousness of this Method, whereby Nature is buied in casting forth the morbid Matter, it is besides very hazardous; for it often happens, that part of the morbid Matter being concocted, and perhaps spit up, the rest remains crude, and so successively, the best Ripening and Expectorating Medicines having been used to no purpose: For sometimes the Expectoration goes on very well, and sometimes it is wholly suppress'd, the Patient in the mean while being in danger on every hand, and for any Power I have over Expectoration, (which is indeed none at all) may be adjudged for Life, or Death: Whereas on the contrary by bleeding, the morbid Matter is in my

Tower, and the Orifice of the Vein may supply the use of the Wind-pipe: For I confidently affirm, That this Disease, which if it be treated by the Method we have spoken against, is deservedly reckoned amongst the most dangerous, may be as certainly and as safely cured by the Method I have now prescribed, as any other Disease whatever, to say nothing now of the short time wherein it is cured; nor could I ever find the least injury befall any one, by so large an Evacuation of Blood, though unskilful People think otherwise.

I have, indeed, often endeavoured to find out some other Method that might be able to do the business without so great loss of Blood, viz. either by resolving the Humour, or by ejecting it by Expectoration. But I never could find any equal to the Practice above-mentioned, by the help whereof, notwithstanding the dreadful Prognostication of Hippocrates concerning a dry Pleurisie I free the Patient from the violence of the Disease by Bleeding, and so cure him, not waiting for Expectoration.

But because the cure of this Disease almost wholly consists in Bleeding repeated, which being performed in places far distant from populous Towns, by unskilful Surgeons and Farriers, poor People are often in danger of losing their Arms, and their Lives are often hazarded by the pricking of Tendons, I thought it proper here to add the Cure of such Punctures when they chance to happen. They whose Tendons are pricked do not presently feel any Pain; but twelve hours after they complain of it, not so much in the Orifice lately made, as in the parts tending to the Arm-pits, where at length the Pain fixes, and is chiefly perceived when the Arm is extended. But there is no great swelling upon the place where the Orifice was made, that scarce exceeding the bigness of an Hazle-Nut; an Ichor continually flows from the Orifice, which indeed is reckoned the chief sign of a pricked Tendon. I have known it Cured after this Manner.

Take of the Roots of white Lillies four Ounces, boyl them till they are soft in a Quart of Cows Milk; then take of Oat-meal, and the Meal of Flax-Seeds, each three Ounces, boyl the Meal to the consistence of a Pulvis in a sufficient quantity of the Milk strained from the foresaid Roots

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Roots, and mingle the Roots washed; make a Cataplasme, apply it hot Morning and Evening to the part affected.

CHAP. IV

Of a Bastard Peripneumonia.

A Fever, accompanied with many *Peripneumonick* Symptoms, invades yearly about the beginning of Winter, but oftner at the end of it: It chiefly seizes those that are of a gross habit of Body, and middle-aged, or, which oftner happens, those that are older, and too much addicted to spirituous Liquors, especially to Brandy; for when the Blood in such Men has been burthened with flegmatick Humours heap'd up in the Winter, and put in motion by the approaching Spring, a Cough is presently occasioned by this means, whereby the said flegmatick Humours rush upon the Lungs; at which time, if the Patient chance to live irregularly, and continues to drink freely such spirituous Liquors, the Matter grows almost thick, which occasions the Cough, and stops the passage of his Lungs, and the Fever consumes the Mass of Blood. At the beginning of the Fever the Sick is sometimes hot and sometimes cold, is giddy, and complains of lancing pains of his Head, when the Cough is violent; he vomits up all liquid things when he Coughs, and sometimes when he does not; the Urine is thick and very red; the Blood taken away is like that which is drawn in a Plourisie; he is often short-breathed, if he be ordered to provoke his Cough; his Head akes just as if it were cleft in pieces, for so the Patient terms it; there is a pain of the whole Breast, at least a pressure of the Lungs, which is perceived by the bystanders: When the Patient Coughs, the Lungs not sufficiently dilating themselves, the vital Passages are, as it seems, shut by the Swelling, and the Circulation on that account is so intercepted, and the Blood so stopp'd, that there are no Signs of a Fever, especially in people that are

of a gross habit of Body; though this may also happen by reason of the abundance of Flegmatick Matter, whereby their Blood is so burdened that it cannot rise to a perfect Ebullition.

In curing this Fever I am obliged to take away that Blood which occasions the Suffocation and Inflammation of the Lungs, and to ventilate and open the Lungs with Pectoral Remedies, and so mitigate the heat of the whole Body with a cooling Diet: But whereas on the one Hand, the heap of flegmatick Matter contained in the Veins daily supplying Matter for the Inflammation of the Lungs, may seem to indicate Bleeding often repeated; yet on the other hand I found, by the best Observation I could make, that Bleeding often repeated has succeeded very ill in several People of a gross habit of Body, especially if they had past the Flower of their Age; and therefore I forbore the reception of it, and instead of it used frequent Purging, which is well enough substituted for those that abhor large and repeated Bleeding.

Therefore I proceed in the following manner: I order that the Patient should be Bled in the Arm when he was in Bed, and that he should not rise till two or three hours after; for Bleeding somewhat weakening and disordering the whole Body, may by this means be the easier born; for the Patient lying in bed can better bear the taking away of ten Ounces, than of six or seven when he is up. The next Day I give the following Potion in the morning.

Take of the Extract of Cassia one Ounce, of Licorish two Drams, of fat Flax number four, of Scilla two Drams and an half, Hyacinth trochiscated one Dram; boil them in a sufficient quantity of Water: In four Ounces of the strained Liquor dissolve one Ounce of Manna and half an Ounce of Syrup of Roses solutus; mingle them, make a Potion.

The next Day I used to Bleed a second time, and the next day gave one I ordered the purging Potion above to be repeated, and to be taken every other Day while the Patient is quite well. When the Patient does not purge, I order him to use a Pectoral Decoction, and Oyl of Sweet-Almonds, and the like.

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I forbid Flesh and the Broth of it, but especially spirituous Liquors; instead of which I allow him for his ordinary Drink a Puslan of Barley and Licorish; and Small-beer, if he desire it.

And by this Method indeed the *Bastard Peripneumonia* is to be cur'd, occasioned by a great deal of Flegmatick Filth heap'd up in the Blood, and, by reason of the Analogy of the Winter, cast upon the Lungs; wherein not only repeated Bleeding, but also Purging is indicated, otherwise than in a true *Peripneumonia*, which I suppose is purely of the same kind with a *Pleurisie*; and that it only differs from it in this, viz. that a *Peripneumonia* does more universally affect the Lungs. And both Diseases are cured by the same Method, viz. by Bleeding chiefly, and by cooling Medicines.

Though this *Bastard Peripneumonia* is somewhat like a dry *Asthma*, both as to the difficulty of breathing, and some other Symptoms, yet it is sufficiently distinguished from it; for in it there are manifest Signs of a Fever and Inflammation, which never appear in this; though in this kind they are much less and obscurer than those which accompany a true *Peripneumonia*.

But it is to be carefully noted, that it is by no means safe to forbid the drinking of Wine, and such Liquors, all of a sudden when the Sick has used them a while, but they must be left off gradually; for there is danger of a Dropick from a sudden Change, which ought to be observed in all Diseases that come off this occasion. And seeing there has been mention made of Spirits of Wine, I will say by the bye, it were to be wished that they were either wholly forbidden, or at least used only for refreshing the Spirits, and not for extinguishing them, or that the internal use of them was wholly prohibited, and that they should be only used by Surgeons in Fermentations, to digest Ulcers, or to cure Burns; in which last Case they are better than any other Medicine yet found out; for they preserve the under Skin from Putrefaction, and so perform the Cure (not waiting for Digestion which requires a considerable time,) the Ray being dip'd in

Spirit of Wine, and presently applied to the Part hurt by scalding Water, [Gunpowder, or the like, and moistned with the foresaid Spirit now and then, till the Pain from the Fire be quite gone, and afterwards only twice a Day.

CHAP. V.

Of a RHEUMATISM.

THIS Disease comes at any time, but especially in the Autumn, and chiefly seizes those that are in the Flower of their Age: It most commonly comes by taking of cold, after the Sick has been heated by violent Exercise, or any other way. It begins with shivering and shaking, and presently heat, restlessness, and thirst; and other Symptoms follow which accompany a Fever. After a day or two, and sometimes sooner, the Patient is troubled with a violent Pain, sometimes in this, sometimes in that Joynt, in the Wrists and Shoulders, but most commonly in the Knees; it now and then changes place, and seizes elsewhere, leaving some redness and swelling in the Part it last possess'd. At first, for some days, the Fever, and the Symptoms above-mentioned, happen sometimes together, but the Fever goes off by degrees, the Pains remaining, and sometimes rage violently, the matter of the Fever being put off to the Joynts; which is manifest, for that the Fever frequently returns when the morbidick Matter is repelled by the unseasonable use of external Medicines. When this Disease is not accompanied with a Fever, it is often taken for the Gout, though it differs Essentially from that, as plainly appears to any one that well considers both Diseases; so that it may be asked, why Physical Authors have not touch'd upon it, unless it be supposed this is a new Disease. However it be, it is frequent enough now, and though it seldom kills any one when the Fever is off; yet upon the account of the violence of the Pain, and the continuance of it, it is not contemptible; for if it be ill managed,

aged, it many times lasts all the life long, though in this case not always so violent. But it comes now and then periodically: And it may so happen, that the 'foresaid Pains may go off of themselves, when they have a long while much tormented the Sick, he being for ever deprived of motion of the Members, the Joynts of the Fingers being as it were inverted with knotted Protuberances, as in the Gout, coming forth more in the internal parts of the Fingers than the external; the Stomach may be very good, and he may be as to other things very well.

There is another kind of this Disease, though it is commonly thought to be another thing; it is properly called the *Rheumatic Ach* of the Loins, a violent Pain being fixed there, and stretching sometimes to the *Os Sacrum*, it seems to be a nephritick Pain, only the Sick does not vomit: For beside the intolerable Pain about the Reins, sometimes also the Ureters all along to the Bladder are afflicted with the same, though not so violently: Upon which account I have been heretofore mistaken, thinking it was produced from Gravel sticking in those Parts; whereas in truth it owed its rise to the peccant and inflamed Matter of the *Rheumatism*, which afflicts indeed only those Parts, the rest of the Body being untouched. This violent Pain continues as the other Species, if it be not cured after the same manner, grievously afflicting the poor Patient, so that he cannot lie in his Bed, but is forced to leave it, or to sit upright, rocking himself continually.

Now, seeing both these Species of this Disease seem to proceed from an Inflammation, which may be supposed by reason of the 'foresaid *Phænomena*, and especially because the Blood taken away is of the same colour with that of Pleuriticks; and no Man ever doubted that those labour of an Inflammation: These things being so, I think the Cure ought to be managed by Bleeding, the Blood in the mean while being attemperated, and its excessive heat allay'd by cooling and thickning Medicines, and also by a convenient Diet.

And therefore as soon as I am called, I order ten Ounces of Blood to be taken from the Arm of the side affected, and I order a cooling and thickning Julep, after this manner:

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Take of the Waters of Purslain and Water-Lillies, and of Lettice, each four Ounces, of Syrup of Limons one Ounce and half, of Syrup of Violets one Ounce; mingle them, make a Juice, of which let him drink as he pleases, or of the Emulsion described in the cure of a Pleurisy.

To mitigate the Pain, a Pultis of White-bread and Milk, tinctured with Saffron, or a Cabbage leaf may be applied to the part affected, and frequently renewed. As to Diet, I forbid all Flesh, and the Broths of it, how weak soever it be; instead whereof I order Barley and Oatmeal Broths, Panada and the like; and for his ordinary Drink I allow Small-beer, or what is better, a Pilsan of Barley, Ligerish, Sorrel, and the like, boyled in Fountain water; and I advise the Patient to keep some hours from Bed every day; for keeping Bed continually promotes and augments the Disease.

The next day I order the same quantity of Blood to be taken away, and a day or two after, according to the strength of the Patient, I bleed again; and then after three or four days I bleed the fourth time, which is commonly the last, respect being had to the Strength, Age, and Constitution of the Patient, and the other Circumstances. I rarely Bleed after the fourth time, unless too hot a Regimen went before, or hot Medicines were used without occasion: and truly the use of Anodyne Medicines requires larger Bleeding: Wherefore, how violent soever the Pain be through the whole course of the Disease, I by no means use these, if I design to cure the Disease by bleeding alone; for by them the Disease is fixed, so that it does not so easily yield to bleeding, which by reason of these too officiously used, must be repeated often than otherwise was needful; neither do they give that Ease which the Titles promise at the state of the Disease. While the Remedies above-mentioned and Diet are carefully used, I now and then inject a Glyster made of Milk and Sugar, on the day the Patient is not let Blood: And I admonish, that all these things be diligently observed for eight days at least after the last bleeding. Afterwards I order a gentle purging Potion to be taken in the morning

ing, and the following Evening a large Dose of *Dianthum* in Cowslip-water, to restrain the fury of the Blood, for otherwise a Relapse may happen; which being done, I advise the Patient to return gradually to his wonted way of living, with respect to Diet, Exercise, and Air; yet with this caution, that he should not at all taste Wine, or any spirituous Liquor, nor salted, or spirited Meats, nor any thing of hard digestion, till a long time after.

After Bleeding repeated as often as I have mentioned, the Pains will be much lessened, yet they will not altogether go off; but when the strength is recovered, which was cast down by Bleeding, especially the next Season of the Year approaching, which conduces more to the recovery of strength, than that in which the Patient was first seized; all the Symptoms will go off, and the Patient will recover perfectly.

But now, tho' by the abovementioned method, or the like, used seasonably at the beginning of the Disease, the end is most commonly, as we have laid, yet it frequently happens, that when the Sick hath been erroneously treated after a quite contrary Method, he is miserably afflicted all his Life long with wandering Pains, sometimes sharp, sometimes more moderate; by which the unwary are easily deceived, and they are commonly accounted Scorbutical Symptoms. And here by the bye, I speak freely, that though I do not doubt but that the Scurvy is really to be found in these Northern Countries, yet I am perswaded it is not so frequent as it is commonly imagined; for many of those Distempers of the Body (not to say most) which we call Scorbutick, are the effects of approaching Ills, not yet formed into Diseases, nor having yet taken a certain Type, or the unhappy Relicks of some Disease not yet conquered, by which the Blood and other Humours are vitiated: For instance; various Symptoms appear in those Bodies, in which some Matter is newly generated, fit to produce the Gout, but not yet cast upon the Joynts, which seems to be Scorbutick, till the Gout is formed, and actually exerts it self, and then it plainly appears what the Disease is: Neither are we ignorant that as many Symptoms resembling the Scurvy, afflict Gouty People, after the Fit is over; namely, when Evacuation untimely used, or the declining Age, or any other Cause has obstructed Nature, so that the

she cannot well put off the gouty Matter on the Joynts; which being retained, and yet of no use, infects the Mass of Blood, and afflicts the Man on all Hands with a great Crowd of ill Symptoms: And this may be said not only of the Gout, but also of an *Incipient Dropsie*; though it is commonly said, where a *Scurvy* ends, there a *Dropsie* begins, yet most commonly this Rule is, to be understood no otherwise than that when a *Dropsie* is apparent, the pre-conceived Opinion of the *Scurvey* vanishes: And the same may be affirmed of very many other chronical Diseases, as yet growing in the Body, and having not yet assumed any Type, or of those which are partly subdued, yet not totally vanquished and expelled; and indeed, unless we allow this the Name of the *Scurvey*, will hugely encrease as it is at this Day, and will in a manner comprise all sorts of Diseases. Whereas if we so diligently penetrated into the secret Recesses of every Disease, as to be able to discover it lying hid under irregular Symptoms, it will presently appear of what Species it is, and be easily referred to the sort to which it belongs. Moreover, the Method whereby such Diseases are to be cured, must be accommodated not to the counterfeit Symptoms, but to the Disease it self, whatever it is, as if it were perfectly formed, and actually existing.

But here it is to be noted, that it is not so proper to bleed so often, when the Disease has taken deep root by some Years continuance, as at the beginning; but it is better that some Weeks should pass betwixt each Bleeding, which will at length either quite carry off the morbidick Matter, or at least so far conduce, that the Relicks of it may be extirpated by an Issue made in one of the Legs, and by any volatile Spirit taken morning and evening in Canary.

But now, how great soever the difference is, as is mentioned above, betwixt a true *Rheumatism* and the *Scurvy* yet it must be confessed, there is another Species of a *Rheumatism* near a kin to the *Scurvy*; for it resembles the chiefest Symptoms of this Disease, and is cured in a manner the same way, and therefore I shall call it a *Scorbutical Rheumatism*. The Pain seizes sometimes this part, sometimes that, but seldomer occasions Swelling than the other kind, neither is it accompanied with a Fever, nor is it

fix'd so long, but is of a more wandering Nature, and has irregular and disorderly Symptoms; now it afflicts this or that Member, by and by it only seizes the inward parts, and occasions Sickness, which goes off again when the Pain returns to the outward parts, and so afflicts the Patient by turns, and continues a long while, like those Diseases that are reckoned most Chronical. It chiefly seizes Women, and Men of a weakly Nature; so that I should imagine it ought to be reckoned among Hysterick Diseases, had not I often found it would not yield at all to Hysterick Remedies.

They who have used the Peruvian Bark for a long time are subject to this Disease, which by the bye is the only inconvenience I ever knew follow upon the use of this Remedy: But however it be, whether the Disease takes its rise on this occasion, or from any other cause, it is very easily cured by the following Remedies, which should have been conceal'd if I had greater regard to my private advantage than to the publick good; for by these alone I have cured many afflicted after the manner I have described, to whom Bleeding, though repeated, Purges, a Milk Diet, and terrefaceous Powders, and the like, have done no good; and they are these.

Take of the fresh Conserve of Garden-Scurvy-Grass two Ounces, of Wood sorrel one Ounce, of the compound Powder of Wake-robin six Drams, make an Electuary with a sufficient quantity of Syrup of Oranges; the Dose, is two Drams to be taken thrice a Day for a Month, drinking upon it three Ounces of the following Water.

Take of Garden-Scurvy-Grass eight handfuls, of Watercresses, and Brooklime, of Sage and Mint, each four handfuls, the peels of six Oranges, of Nutmegs half an Ounce; infuse them in six Quarts of Brunswick Mum, and distil them in a common Still, and draw off but three Quarts for use.

The exact Dose of compound Powder of Wake-robin must be exactly observed, at least it must not be lessened.

C H A P. VI.

Of an Erysipelatose FEVER.

THIS Disease seizes every part of the Body, and at any time, but especially the Face; and chiefly at the latter end of Summer; at which time the Sick is often seized when he is abroad, his Face is suddenly swelled with great Pain and redness, and full of small Pimples; and when the Inflammation is more encreased, Bladders sometimes arise afterwards over the Forehead and Head, and the sick is blind with it: (the Country People call this a *Bligh*) nor is it much different, only there are Pustles like those that accompany the stinging of Bees. The most noted, and common Species of an *Erysipelas* was in this manner.

But whatever part it seizes, and at whatever time of the Year, shaking and shivering, unless they did precede (which sometimes happened a day or two before) most commonly accompanied this Inflammation; also Thirst, Restlessness, and other Signs of a Fever: The Disease proceeding, as the Fever first occasioned the Pain, Swelling, and other Symptoms, (which encreasing daily, sometimes end in a Gangrene) so these in like manner do not a little encrease the Fever, till both are removed by proper Remedies.

There is another sort of this Disease, though it seldom happens; this invades at any time of the Year, and most commonly it is occasioned by the too free use of subtle and attenuating Wines, or such like spirituous Liquors; a small Fever begins, and is presently followed by an Eruption of Pustles, almost over the whole Body, which are like the stinging of Nettles, and sometimes turn to Bladders; they soon strike in, and hide themselves under the Skin, and itch intolerably; but after a little scratching they appear again: As to the Cure, I suppose the peccant

ſant Matter mix'd with the Blood, muſt be evacuated, and the Ebullition of the Blood ſhould be ſtopped by Remedies that qualify it; and laſtly, That the Matter thruſt out upon the Parts ſhould be diſcuſſed.

That theſe things may be done, as ſoon as I am call'd, I order a large quantity of Blood to be taken from the Arm, which almoſt always is like that of Pleuriticks; the next day I give my common Cathartick Poſion, and at Bed-time, if it has work'd too much, ſome Purgative Draught: *Dia-codion* in Cowſlip-flower-water; or the like; Purging being over, I order the part affected to be fomented with the following Decoction.

Take of the Roots of Marſhmallows, and Lillies, each two Ounces, of the Leaves of Mallows, Elder, and Mallow, each two handfuls, of Aſclepias, St. John's Wort, and of the leſſer Centaury, each one handful, of the Seeds of Flax and Fenugreek, each half an Ounce, boyl them in a ſufficient quantity of Water to three Pints; Strain the Liquor, and when you uſe it, add to each Pint two Ounces of Spirit of Wine; bathe the part affected twice a day with this Decoction hot, with ſoft Flannels dipp'd in it; and after the Fomentation andint the part daily with the following mixture.

Take of Spirit of Wine half a Pint, of Venice-Treacle two Ounces, of Cloves and long Pepper powdered, each two Drams, mingle them, cover the part affected with Brown-paper dipp'd in this mixture.

Moreover, I order the Patient to be dieted with Oat-meal and Barley-broths, and roaſted Apples, and that he ſhould drink Small-beer; and that he ſhould keep from Bed ſome hours every day. By this Method the Fever, and other Symptoms moſt commonly ſoon go off, if not, I bleed again, and ſometimes a third time; a day being betwixt each bleeding; namely, if the Blood be ill diſpoſed, and the Fever high. Of the days I do not bleed, I order a Clyſter of Milk and Syrup of Violets, and cooling Julep made of the Water of Water-Lillies, and the like, deſcribed in the Cure of a Rheumatism, to be taken every hour; but moſt commonly once bleeding, and the follow-

ing Purge, if they are used in time, do the business.

That sort which resembles the stinging of Nettles with itching, is to be cured the same way, only the outward Medicines are not so necessary.

I will say here by the bye, that tho' not only this Disease of which we now speak, but most others which seize the Skin, and are accompanied with some Eruption, if they are Chronical, easily yield to this Method, and soon go off by Bleeding and Purging repeated; yet some of them are to be treated in a quite different manner: For the Evacuations now spoken of, though repeated, and testaceous Powders designed for sweetning the Blood, do no good when some Recrements that are ill disposed lie deep in the Skin, and cannot be removed by any thing but Remedies that strengthen the Blood, and are fit to open Obstructions of the Pores. I have used the following Method with good Success in the violent Itch, and in inveterate Eruptions of the Skin of that kind.

Take of Venice Treacle half a Scruple, of the Electuary of the Egg one Scruple, of the Root of Virginian Snake-weed finely powdered fifteen Grains, of Oriental Bezoar-stone five Grains, with a sufficient quantity of the Syrup of candied Citron; make a Bolus to be taken in the Morning, and at Bed-time, for one and twenty days, drinking upon it six Spoonfuls of the following Julep.

Take of the Waters of Carduus Benedict. six Ounces, of Epidemick and Treacle-water, each two Ounces, of Syrup of Gillyflowers one Ounce; mingle them, make a Julep.

Every Morning after taking the Medicine, let him sweat an hour or two, or rather, being covered with more Cloaths than he used to have on, let him indulge a breathing Sweat in Bed for the time aforesaid. These things being done, if the Pustles do not yet vanish, anoint the Parts affected with the following Liniment.

Take of the Ointment of sharp-pointed Dock two Ounces, of Pomatum one Ounce, of Flowers of Sulphur three Drams, of Oyl of Rhodium half a Scruple; make a Liniment.

But

But the Medicines before prescribed must not be used before Bleeding and Purging duly premised ; which, though given alone, they do not perform the Cure, yet they secure the Patient against a *Fever*, which might otherwise happen by reason of the use of hot Medicines.

There is another sort of Eruption, though less frequent ; for the Cure whereof no Evacuations are directly proper. This, though it appears in other parts of the Body, yet it most commonly appears in the Breast, and fixes it self in some determinate place ; it scarce rises higher than the Skin, and shews it self like a broad Spot, only it seems somewhat of a yellowish colour, by reason of Scales that are so tinged : This Spot, when it is out, keeps the Man well : but when it vanishes, he has often a light Sickness, and his Urine is rendred thick and red, but inclining somewhat to a yellow. In this Disease also you must proceed the same way, and after universal Evacuations, with the same Remedies as in the violent Itch above-mention'd. And moreover, which must not be forgot, the use of Wine and Flesh of easie Digestion, must by all means be allow'd ; for all cooling things do more hurt than good : And so this last Species of Eruptions is cured ; but sometimes it will not go off without drinking of Steel-waters for a long while.

C H A P. VII.

Of the Quinsie.

IT comes at any time of the Year, especially between Spring and Summer ; it chiefly seizes young Men, and such as are of a sanguine Constitution, and Red-hair'd People (which I have often observ'd) more than any others : They shiver and shake presently at the beginning of the Disease, a *Fever* follows, and a little after a Pain and Inflammation of the Jaws ; and if the Patient be not seasonably reliev'd presently, he can neither swallow nor draw

his breath thro' his Nostrils, so that he is under the apprehension of strangling, by reason the Jaws are stopp'd by the Inflammation and Tumours of the Uvula, Almonds, and Larynx, and is indeed in a manner suffocated. There is great danger in this Disease, for it sometimes destroys a Man in a few hours; namely, when a great deal of the febrile Matter is cast upon the foresaid Parts, and when the violence of the Disease is not timely prevented by the use of proper Remedies.

In order to the Cure I presently take away Blood plentifully from the Arm, and presently after from the Veins under the Tongue; and then I order that the inflamed Parts should be touch'd with Honey of Roses, made very sharp with Spirit of Sulphur, and that the following Gargarism should be used, not after the common way, but that it should be kept in the Mouth without any agitation, until it wax hot, and then that it should be spit out, and that it should be repeated now and then.

Take of Plantain-water, and red Rose-water, and of the Water of Frogs-spawn, each four Ounces, the Whites of three Eggs turned into Water by beating, of white Sugar-candy three Drams; make a Gargarism.

I likewise order the Patient to take daily of the Emulsion prescribed in the cure of a *Pleurisie*, or the like.

The next Morning I bleed again, unless the Fever and difficulty of breathing abate, and defer Purging till the next day; but if both these are lessened, I presently give a lenitive Purge, which I have found very necessary by manifold Experience, above all other things after bleeding: If the Fever and other Symptoms are like to be troublesome after Purging, which is very rare, they are to be quell'd by bleeding repeated as before, and by applying a large and strong Blister to the Neck, a cooling and emollient Glyster is to be injected every Morning, except when the Patient purges, through the whole course of the Disease. I forbid the use of all sorts of Flesh, and their Broaths; and the Patient ought only to eat Oatmeal and Barly-Broaths, roasted Apples, and the like: Let him drink a Pilsan, or Small-beer; let him keep up some hours every day, for the warmth of the Bed augments

ments the *Fever*, and other Symptoms, which I endeavour to Cure by this Method. But it is to be observed, that such a *Quinsie*, which is only the Symptoms of a *Fever*, I call stationary, is to be cured by that Method which is requisite for the *Fever*, and so is either to be removed by Sweat and Transpiration, or by any other Method of Cure, which is necessary for the primary *Fever*, on which it depends, which is worthy to be noted.

There are other *Fevers* which are to be reckoned with Intercurrents, which because they immediately go another way, and end in this or that Symptom, are commonly accounted *Fevers*, tho' they were originally such: and the disorder from whence the Disease takes its name is only the Symptom of the *Fever*, which ends in it. I will at present speak only briefly of bleeding at the Nose, and of spitting of Blood.

Bleeding at the Nose comes at any time of the Year, and afflicts those chiefly that are weakly, and of a very hot Constitution, and more frequently when they are old than when they are young. At first there is some Signs of a *Fever*, which goes off suddenly, making way for it self through the Nostrils; there remains nevertheless a pain and heat in the forepart of the Head; the Blood flows some hours, then stops a while, and soon breaks out again, and so by turns, till at length it wholly ceases, being restrained either by the use of Medicines, or stopping of it self, by reason a great quantity of it has been lost; yet the Patient is in danger of a Relapse every Year, if the Blood happens to be much heated by spirituous Liquors, or any other occasion.

In this case I do all I can to restrain the violent Heat and Ebullition of the Blood, from whence arises the said unusual Extravasation, and to turn the force of it another way; and to which end I bleed often in the Arm, and take away Blood freely, which is always of the same colour with that which is drawn in a *Pleurisie*. I order a cooling and thickning Diet, as three parts of Fountain-water and one of Milk boiled together, and drank cold, roasted Apples, Barley-Broaths, and such things as are made without Flesh, also cooling and thickning Juleps, and Emulsions: And I order the Sick to keep from Bed

daily for some time, and that a gentle cooling Glyster be injected every Day, and not once omitted; I also order'd a Paregorick Draught of Diacodium at Bed-time to quell the fury of the Blood. But because a sharp Humour often accompanies such Hæmorrhages, which being mingled with the Blood furthers its motion, and opens the Orifice of the Veins. Besides Revulsion and cooling, I usually give a gentle Purge, when the Disease is even at his height, and after it has done working, an Anodyne in a larger Dose than ordinary; and when the Symptom is quite gone off, I give another Purge. As to external Applications, a Linnen Bolster dipp'd in cold Water, wherein Sal Prunella has been dissolv'd, and gentle press'd out, may be apply'd to the Nape of the Neck, and to both sides of it often in a Day; and after general Evacuations, the following Liquor may be applied.

Take of Hungarian Vitriol and Allum, each one Ounce, of Flegm of Vitriol half a Pint; boyl them till all is dissolved; filter the Liquor when it is cold, and separate it from the Crytalls, that sometimes rise, to the remaining Liquor add a 12th part of Oyl of Vitriol, and put a Tent dipp'd in this Liquor into the Nostril from whence the Blood flows, and keep it two Days.

Rags moisten'd with this Liquor and applied, stop Blood from what part soever it flows.

Spitting of Blood, which betwixt Spring and Summer befalls Weakly People of a hot Constitution, whose Lungs are infirm, and rather Young People than Old, is almost of the same Nature with the Bleeding at the Nose. I have just now treated of; for this is also a Fever, that puts off its Name and Essence by the Crisis it is discharged, with this only difference, in a manner, that in the former Diseases, the Blood being too much agitated, rushes violently into the Veins of the Nostrils, but in this, upon the Lungs: And as in that, during the Flux, there is continually a Pain and Heat in the fore-part of the Head, so in this the Breast is afflicted with both, together with some Weakness; and this Disease requires almost the same Method of Cure, only it will

not

not bear Purging; by which, especially if repeated, the Sick is apt to fall into a Consumption: But Bleeding used often, a Glyster injected every Day, Diacodium taken at Bed-time; moreover, Medicines, and Diet thickening and cooling will do the business effectually. And these are the things which I have hitherto observed concerning the numerous Tribes of Diseases divided into various Kinds, which are reckoned under the Name of Fevers, and of those Symptoms which depend on them; in which I have acted so carefully, that I have not imposed upon the World my own Fancies and Imaginations, but have delivered faithfully the History of them, and their *Phænomena*, without respecting any Hypothesis. I have also treated of their Cures with the like Sincerity and Care: And if an earnest Desire of finding out, and establishing a more certain Method of Cure has forced me to go into untrodden Paths, I hope none of the Learned will charge me with either despising their Judgment, or trusting too much to my own, or that I affect Novelty; for the good success that I have had in discovering these things has hitherto much encouraged me, and the Experiment of those that come after will undoubtedly clear my Reputation. And truly this destructive Troop of Diseases is not to be opposed lazily, which wages desperate War with Mankind every Day, and which destroys two thirds of Men at least, if you except those that die of a violent Death. The continual force of these Diseases, and the daily destruction of the strongest and youngest Men especially (notwithstanding those Helps, which hitherto those specious Methods which are confidently described in the Books of Speculative Writers, have hitherto afforded us) much disturbed my Mind, while I was considering these things; for really I found, that those vain Speculations did so little conduce to the recovery of Health, that they which fled to them as an Asylum, whatever these dogmatical Boasters promised, were no more secure than those, which neglecting all Art, left the business to Nature. If I have done any thing whereby the Dangers, which often occur in curing Diseases, may be any way lessened (which at least, I hope I may modestly promise my self) I have in some sort my Ends, and the

pleasing Reward of my great Labour rightly bestowed on seeking the Good of my Neighbour. These are the chief things which I have hitherto found, or which I could reduce to a Method about the *Fevers* and Symptoms, which depend on them, to the 30th of December 1675.

Dr. Sydenh.

Dr. Sydenham's Two Epistles :

The First, of Epidemical Diseases
from the Year 1675, to the
Year 1680.

*To the Learned and Worthy Dr. Brady, Master
of Caius College, and the King's Professor
of Physick in Cambridge.*

The Second, of the History and
Cure of the French-Pox.

*To the Accomplished and Worthy Dr. Henry Pa-
man, Fellow of St. John's College in Cam-
bridge, the University Orator, and Professor
of Physick in Gresham College, London.*

To the Famous Physician Dr. Thomas Sydenham.

Worthy Sir,

NO Physician as yet, Learned Sir, besides your
Self, has duly considered the force of the Air,
and the influence of it upon Human Bodies, nor
has any one well consider'd, how it Acts for
preserving of our Lives, nor has any one observed how
much it conduces towards the Fermentation, Alteration,
and Circulation of the Blood, and to all Animal Motion;
nor have any Writers of Natural, or Medicinal History
touched

touch'd lightly, so far have they been from searching thoroughly into its natural Temper, various Alterations, and Changes, which Constitutions you have well discover'd ; for truly it cannot be, but that when the Air insinuates its self into all, and the remotest parts of the Body, it shou'd imprint, and communicate the Alterations and Changes, it undergoes by the things wherewith it is impregnated, to the Juices and Blood : upon which account most commonly, from this or that ill Constitution of the Air, arises this or that ill Disposition of the Blood ; therefore you have excellently well instituted your medicinal Observations, of the History and Cure of acute Diseases, according to the various Constitutions of Years, and the parts of them : for by them, the Actions of the Air upon the Blood, Juices, and especially upon the Spirits (which perhaps they are the matter of) are perceiv'd, and I do not at all doubt but that the Genius of Fevers observed from the Temper of the Years, wherein they raged, is the best, if not the only Method to establish Practice. Go on therefore, and if any Observation yet remain of the Fevers of the Years last past, be pleas'd to publish them, and in so doing you will very much further the Health of Mankind.

In the Fifth Chapter of the First Section of your Book, you said somewhat of the use of the Jesuits Powder ; indeed, I know some Physicians of good Note give it in a large quantity, and repeat it often, and others that make Extracts, and Infusions of it, and of the Infusions, Julaps and Emulsions, whereby they affirm they can certainly Cure Agues, and also some continual Fevers : without doubt it is an excellent Remedy to cure Agues, I indeed have used it about Twenty Years in various Forms, and prepared it several ways with very good Success ; if you know anything peculiar about the use of it, I desire you wou'd publish it.

In the Cure of a Rhematism, you have propos'd frequent and large Bleeding as necessary ; I desire to know, whether it may not be as certainly cured some other way, as by that cruel and severe way of Bleeding : But worthy, Sir, in doing these things, you must expect to be calumniated and reproach'd by ill Men ; but such Treatment, and such Men are very displeasing to the Ingenious ; for if
they

they would search out an History of Fevers approved by long use, and the Essences, Causes and Differences of them, and the true method of Cure, they must take you for their Guide ; for the nature of them, and their method of Cure can be found no other way ; be therefore Courageous, and despise these insignificant Slanderers, and go on to promote the Ingenuity of honest Men ; you have shewn the way, and if what you have done does not please ; let those that cavil shew a righter and better. Farewel, worthy Sir, in performing these things, you have obliged the whole Province of Physick, and among the rest,

*From Camb. the 30th.
of Decem. 1679.*

Your obliged Friend

R. BRADY

To the Learned and Accomplished Dr. Brady.

Worthy Sir,

IT is certainly very reasonable, That I, if I have any whit advanced the Cure of Diseases, shoud impart freer than other Men to any one that asks me about it ; for if I know only those things which other People know, (which I am well satisfy'd of) it is no injury to me to divulge such trifles, and common things ; but if I have obtained any thing that is beneficial in Physick, and that renders the Cure of Diseases more certain, so much praise is not due to me for publishing it, as woud be to any other ; for having been afflicted with the Gout for about Thirty Years ; and a long while severely handled by the Stone, I can easily imagine how heartily I shoud rejoyce, if any one would shew me how I might be freed from my Misery ; but there being very few to whom God Almighty has granted this great Privilege of being beneficial to the Publick in this Case, and it is only to be done sucessfully, by those that are made of better Clay than I am ; for, indeed, I have not Power enough to do it ; but have always thought, and not without reason, that there is more Happiness in discovering a certain method of curing, though but of the least Disease, than

than heaping up the Treasures of *Tantalus*, or of *Croesus*. More Happiness I say, and more Wisdom too; for what better Specimen can any one shew of his Wisdom and Goodness than to do continually all he can rather for the publick Good, it being part of the common Nature of Mankind, than for himself, he being so small, and so contemptible a part of the whole? for to speak according to my *Cicero*, the great Master of speaking and thinking, the Genius of his Age, not to say of the Nature of Men in general; the Laws postpone the good of particular Persons to the good of all, to a good and wise Man, and one that is obedient to the Laws, and knows his Duty, endeavours the good of all Men more than of any one, or of himself; and, indeed, every one knows it is the part of a wicked Man to destroy Men; but the Duty of a good Man to preserve them, and to instruct others, so as that they may be able to free them from Death, after he is dead; and this is a very wicked and abominable Saying, *viz.* Come what will when I am in my Grave.

But these things being past over for the present, I must confess, that I ought to discover plainly to you, those things that I have thought of the Diseases you inquire about, how small soever they be, to you, worthy Sir, that deserve the Office that you have, and I render with the University wherein you flourish, the Encomiums of Learning, Honesty, and Candor of Mind, and must mention with thanks the Sense you have of the Affronts that are offer'd me by some, of whom I must say thus much, that if the harmless Life of a Man, that has injured none in Word, or Deed, could have secured me, they never wou'd have rav'd against me; but seeing it happens so, when I am not to blame, nor I hope never shall be, I am resolv'd not to be troubled for their Faults, supposing that all that I have to do is to perform the Duty of an honest Man, and of a good Physician, as far as I am able.

Therefore I will set down the Observations I have made concerning the Diseases you inquire about; and first I will treat of the Agues, that are now Epidemical with us, and in doing which, I think it will not be amiss to run through those Years orderly, though briefly, which followed that, wherein I finish'd my History of
acute

acute Diseases (such as it was,) which raged for Fifteen Years last past, and to mention briefly by the bye, something that I have mention'd before, of the Cure of them, which being done, we may better understand at what time, and in what manner the Constitution that now prevails stole upon us.

The Year 1676, produced the same Diseases, that were generated by the Constitution last treated of, in the said Observations, viz. of the Years 1673. (in the Autumn whereof it first began) 1674, and 1675; but this Constitution decaying, the Diseases that broke out were gentler than they were wont to be, and were not so Epidemical, notwithstanding the peculiar disposition of the Year, as to the manifest qualities, of the Air, whereby it was much different from the preceding Years, for the heat of the Summer, and the cold of the Winter were much greater, than had been known in the Memory of Man, and seeing so great a difference in Seasons produced the same Diseases, it is manifest from hence, that the occult temper of the Air causes Diseases more, than the manifest Qualities of it. But it must be confessed that the same Diseases, as to some Symptom, depend sometimes on the manifest disposition of the Air, which appears plain from the Measles, and the *Cholera Morbus*, which invaded in this Year, whereof I will speak briefly.

For the Measles that broke out at the beginning of the Year, tho' they were not very Epidemical, yet this was remarkable in them, viz. they continu'd longer; for whereas according to their Custom they began in January, and increased till the vernal Equinox, and then decreasing by degrees, they vanish'd in a moment about Midsummer; this Year they lasted almost to the Autumnal Equinox, being strengthn'd as I conceive by the heat of Summer, so as to last longer, and yet they did not require a new method of Cure. At the end of Summer the *Cholera Morbus* raged Epidemically, and being heightened by the unusual heat of the Season, the Symptom of Convulsions that accompanied it were more violent, and continued longer than ever I observed before; for they did not only seize the Belly, as they were wont, but now all the Muscles of the Body,

and

and the Arms and Legs were especially seiz'd with dreadful Convulsions, so that the Sick would sometimes leap out of the Bed, endeavouring by stretching his Body every way to suppress the violence of them. But though this Disease did not require any new method of Cure, yet stronger Anodynes and oftner repeated than were usual, were plainly indicated: For instance, being called to a certain Patient, that was almost destroy'd with this dreadful Symptom (Dr. Goodall accompanied me, whose Candor, unsotted Probity, his great kindness to me, and his indefatigable endeavours to find out, and cure Diseases, always come into my mind, when I mention his Name) and with violent Vomiting, was just dying by reason of the violence of the Convulsions: He was in a cold Sweat, and his Pulse could scarce be felt. I gave him Twenty five Drops of my *Liquid Laudanum* in one Spoonful of strong Cinamon-water; for I did not dare to give a larger Vehicle, lest it should occasion Vomiting (as it often happens when there is a great inclination to Vomiting) and sitting by the Bed about half an hour, and perceiving the strength of the Medicine was not sufficient to stop the Vomiting, nor the Convulsions, I was forc'd to repeat it, and to increase the Dose so, (but there was such a space as that I might know what was to be hoped for, from what was already taken before I gave any more) as that the violence of Symptoms was at length quell'd; but yet they were apt upon the least motion to rebel, and therefore I strictly order'd that the Body shou'd be kept very quiet for a few Days, and that he shou'd take now and then the foresaid Medicine in a smaller Dose, when he was well, to confirm the Business, and this succeeded according to my desire.

Nor is there any reason why any one shou'd count me too bold, because I venture to give so great a quantity of *Liquid Laudanum*; for it is plain by Experience, that for those Diseases, Preparations of *Opium* are indicated (and they are three, violent Pain, Vomiting, or a great Loosness, and great Disorders of the Spirits) in these both the Dose of the Remedy, and the Repetition of it must be according to the Greatness of the Symptom, for that Dose which will be sufficient to quell a small Symptom, will be overcome by a stronger, and that which wou'd other-

otherwise indanger the Life of the Patient, will in such a case save his Life.

And these are the Diseases which raged this Year, viz. the same with these of the three foregoing Years; but what those were that raged the following Year, viz. 1677. I can't say, for at the beginning of the Year, I was much troubled with a bloody Urine upon the least motion, and not long after with the Gout, which was not so much in my Limbs, as in my Bowels, where I was grievously tortured: I was also weak and without appetite, and my Legs swell'd; I had also other Symptoms that were no less dangerous, so that I cou'd willingly have dy'd then; upon this account I kept at home three Months, and afterwards was forced to go into the Country, for the recovery of my Health, and to continue there almost as long; but returning in the Autumn, my Friends told me that there were a few Agues here and there, but chiefly in the Country, but being by reason of Sicknes unable to visit Patients, I cannot write any thing of this Year.

The next Year 1678, the constitution of the Air being wholly changed, so favoured Agues, that they became again Epidemical; whereas they had in a manner wholly left the City for the Space of thirteen Years, from the Year 1664, only here and there they seize some, or perhaps were brought with them out of the Country, and they will not continue as they are, but will increate till the disposition of the Air comes to its height, on which they depend; for though there were few of them in the Spring, yet they did so rage above all other Diseases at the latter end of Summer, and in Autumn, that they alone were Epidemical; but in the Winter they gave way to the Small-pox, and to other Epidemical Diseases, till a fit Season for Agues returned.

But now that I may deliver what I have carefully observed, concerning the Nature and Causes of these Agues, it must be first noted, though Quartan Agues were heretofore most common, now they were either Tertians or Quotidians (unless the last be called double Tertians) and likewise, that though these Tertians and Quotidians, sometimes invading with shaking and shivering, and then Heat first following, and soon after Sweat, and in a perfect

fect Apyrexia, and return again afresh, after a stated Period, yet they did not keep this Order above three or four Fits, especially, if the Patient was kept a Bed, and took hot Cordials, which add Oyl to the Fire, as they say; for then the Disease was so heightened even contrary to its Nature, that instead of an intermission, there was only a remission, and coming daily nearer to the Species of continual Fevers, seizing the Head, destroyed many.

As to the Cure, it has now been well known to me for many Years, how dangerous a thing it is in Tertians and Quotidians, (which when they are new, and have put on no Type, are still next door to continual Fevers) to attempt the removal of them by Sudorifics; for tho' it is very well known, that as soon as the Sweat breaks out, Restlessness and other Symptoms vanish immediately, and Apyrexia succeeds, and therefore of consequence it must be indulg'd a little, at least not hindered, when the Fit is going off; yet it is very evident, that if Sweat be forced more than it shou'd, the Fever which intermitted will prove continual, and the Life of the Sick is in a hazardous condition; one is saved, and the other dies: the reason is this, unless my conjecture fails me, viz. that this profuse Sweat, when it exceeds the degree of the febrile Matter, exalted so far by the heat of the Fit, as that part of it answering to one Paroxysm may be ejected, it waists the rest of it in inflaming the Blood. Therefore whilst I considered how ineffectual this method was, and also other Evacuations, that is, Bleeding and Purging, both whereof by relaxing the Tone of the Blood protract the Disease, the Peruvian Bark gave me the most certain hope; concerning which I can safely say, notwithstanding the prejudice of the common People, and of some of the Learned, I never saw, nor cou'd reasonably so much as suspect any mischief wou'd happen to the Sick from the use of it, tho' they who have used it a long while, as I have shew'd in the Chapter of a Rheumatism, are sometimes subject to a Rheumatick Scurvy; but this very rarely happens on this account, and when it does, it is easily cured by the Remedies there described; and truly, if I were as well assured of the duration of its effects, as I am of its innocence, I shou'd not doubt to give it the first place, among all Medicines that are

are yet known; for it is not only found to be of excellent Virtue in this Disease, but also in the Diseases of the Womb and Stomach; so little reason has any one to complain of the unwholesomeness of it.

But the said Bark has got an ill Name, I suppose for these Reasons, chiefly; First, because all the dreadful Symptoms that attend an Ague, when it has tormented a Man a long time, are imputed to the Bark, when he has scarce used it once; Secondly, because many suppose, seeing it drives away the Disease by an occult Virtue, and not by sensible Evacuation, that the matter causing the Disease, which shou'd have been cast out, is shut up by the astringent Virtue of the Bark, like an Enemy within the Walls ready to give new disturbance, and that the Patient is not quite free, for he drags his Chain after him still; but these Men do not consider, that the Sweats, which come at the End of the Fit, have cast off all that, that was gathered on the well days, there remaining only the Seeds of the Disease to be ripen'd in time, and that the Bark pursuing the flying Fit (when all the provision or sustenance of the Disease, which should have been sent in, is intercepted) cannot be said to retain that in the Blood, which cannot be found there, unless in *Embryo*, and therefore must not be thought guilty either of those Fits, or Obstructions which are commonly objected.

But by what means do we find that the Bark drives away Agues, by its astringent Faculty? he that wou'd prove this, must necessarily first produce other astringents indued with the like Virtue. Indeed I have tryed the strongest of them, cou'd never yet obtain my end; yea it cures some, who after the taking it, go as often to stool, as if they had taken a strong Purge. But when all is said, it is the truest Wisdom for every one to keep within his due Bound, but if any one will deceive himself, and think he is indued with other Faculties, than what are subservient, either to natural Religion, that is, that due Veneration be given to God, the Maker and Governour of all things, with the profoundest Prostration of Mind, which he of right deserves, or to moral Philosophy, that he may exercise Virtue, and become serviceable to Human Society; or lastly, to the Art Medical

Mathe.

Mathematical, or to some other Mecanical Trade, which are beneficial to Mankind; let this Man first draw an Hypothesis from the natural School Philosophy, whereby he can explain, but only one Specifick Difference of things in Nature; for instance, let him give a reason why all Grass is every where found to be green, and never otherwise; and the like; if he can do this, I will readily subscribe to his Judgment; but if not, I will not fear to say, that all a Physician's Care and Industry should be bestow'd in searching out the History of Diseases, and in using those Remedies, which, Experience being his guide, are able to cure them, ever observing that method which right Reason founded, not on speculative Imaginations, but the right and natural way of thinking shall dictate; I will therefore briefly set down, what I have learn'd by practice concerning the method of giving the Bark.

The Peruvian Bark, which is commonly called the Jesuit's Powder, about 25 Years ago, if I remember well, first became famous at London for curing Agues, and especially Quartans; and indeed for very good reason, seeing these Diseases were rarely cured before by any other Method or Medicine, wherefore they were called *Opprobria Medicorum*, and were truly a reproach to Physicians; but not very long after it was dam'd for two Reasons, and those no small ones, and so was wholly disus'd: First, because it being given a few hours before the Fit, according to the received custom of that time, it sometimes killed the Patient, and so I remember it happened to a Citizen of London, one Alderman Underwood, and to Captain Potter an Apothecary in Black-Friars; this Tragical effect of the Powder, tho' very rare, did yet deservedly withdraw the best Physicians from the use of it. Secondly, because tho' the Patient was rid of his Fit by it, which wou'd otherwise have come, and it seldom fail'd; yet within fourteen Days he relaps'd, that is, when the Disease was new, and had not spent it self by length of time. Most Men being sway'd by these Reasons, quite cast off the hope they had formerly conceived of this Powder, neither did they so value the keeping off of a Fit for a few Days as to endanger their Lives by taking the Powder. But having for several Years

Years since seriously considered with my self, that the Virtue of this Bark was not common, I was confident Agues cou'd better be cured by no other Medicine than this Herculean one, if it were used with care; therefore I considered a long time how I might prevent the danger impending from the Powder, and the Relapse, which followed in a few Days, which were the two Inconveniencies to be avoided, and by the help of it to promote the Patient to a degree of perfect Health.

First of all, I suppose, the danger that was threatened did not so much proceed from the Bark, as from the unseasonable use of it; for when great store of Febrile matter is gathered in the Body on the days of intermission, the aforesaid Powder, if it be taken immediately before the Fit, hinders the Morbifick matter from being ejected according to Nature's method; that is, by the force of the Fit, and being contrary to all reason shut up, usually endangers the Patient's life; now I reckoned, I cou'd prevent this mischief, and also put a stop to the breeding of Febrile matter anew, if after one Fit is off, I presently gave the Powder, that the following might be stop't; and if on the days of intermission at set times I repeated now and then the same till a new Fit were coming; I might gradually, and therefore safely, thoroughly tinge the Mass of Blood, with the Salutiferous virtue of the Bark.

Secondly, Since the relapse, which usually happens within fourteen Days, seemed to be occasioned, because the Blood was not sufficiently saturated with the Virtue of the Febrifuge, and for that reason was not efficacious enough, therefore I thought nothing wou'd be so good for preventing a relapse, as the repetition of the Powder at due distances, before the Virtue of the preceding Dose was quite spent, though the Disease at present was quelled.

My mind therefore, swayed with the weight of these reasons, dictated to me the method I now use: being called to one ill of a quartan Ague, suppose on a *Munday*, if the Fit is to come the same day, I meddle not, but only put him in hopes that he shall be freed from the next; and therefore the two well Days, that is, *Tuesday* and *Wednesday*, I give the Bark in the following manner.

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Take

Take of the Peruvian Bark finely powdered one Ounce, make an Electuary with a sufficient Quantity of Syrup of Gilliflowers, or of dried Roses, divide it into twelve parts, whereof let him take one every fourth Hour, beginning immediately after the Fit, and let him drink a Glas of Wine immediately after it; Or if the Sick like Pills better;

Take one Ounce of the Peruvian Bark finely powdered, make midling Pills with a sufficient Quantity of Syrup of Gilliflowers, whereof let him take six every fourth Hour.

But one Ounce of the Powder may be mingled with a Quart of Claret with the same success, and less trouble, and eight or nine Spoonfuls may be given at the same distance of time we mentioned before: On *Thursday*, at which time the Fit is fear'd, I order nothing, because usually none comes, the reliques of the Febrile matter being despumated, and ejected out of the Blood by the usual Sweats which compleated the preceeding Fit, and the gathering a new *Minera*, or *Fomes*, being prevented by thy repeated use of the Powder of the Days between the Fits.

But however, least the Disease should return, which was one of the foresaid Inconveniencies, on the eighth Day precisely after the Patient had taken his last Dose, I certainly give him the same Quantity of the said Powder, that is, one Ounce divided into twelve parts, in the same method I gave the former: but tho' the Bark once repeated in this manner often cures the Diseases; yet the Patient is not wholly out of danger, unless he follows his Physician's directions, when he prescribes him the same method at the same distances, a third or a fourth time, especially when the Blood has been weakened with some preceeding Evacuation, or the Patient has unadvisedly exposed himself to the cold Air.

But tho' this Medicine has no purgative Virtue in it, yet by reason of the peculiar Temper, and *Idiosyncrasie* of some Bodies, it often happens that the Patient is violently purged, as if he had taken a strong Cathartick. In this

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happens often*

at Cambridge Nov. 1712

this case, it is altogether necessary to give *Laudanum* with it, that it may not purge, which is plainly contrary both to its own Nature and to the Disease, but that it may be retained until it has done its business; therefore in this Case I order ten drops of *Laudanum* to be drop'd into Wine, and to be taken after every other Dose of the Powder if the Looseness continues.

I proceed in the same Method with other Agues, whether Tertian or Quotidian; for upon the ending of the Fit, I immediately fall upon both, and I follow and press them as much as their Nature will bear by the repetition of the Medicine, in the spaces betwixt the Fits, yet with this difference, that whereas a Quartan can be very rarely taken off with less than an Ounce divided into Doses; the other may be so subdued with six Drachms, that they will grant a Truce at least.

But tho' Tertiars and Quotidians, after a Fit or two may seem to intermit, yet often times, they afterwards turn into a kind of continual Fever, as I have noted before, and come only to a remission, even on those Days they promised an intermission, especially when the Patient has been kept too hot in Bed, or has been punished with Medicines to carry off the Ague by Sweat; in this case, taking an opportunity from the remission, be it never so small, for that is all is left me, I give the Powder just after the Fit, as near as I can guess, viz. every fourth Hour, as I said, making no matter of the Fit, because otherwise in so short an interval, the Alexiterick Virtue of the Bark cannot be communicated to the Blood.

And tho' the Agues which are now frequent amongst us, after one or two Fits, incline to continual Fevers, yet since they must be referred to Intermittents, I make no scruple to give the Bark, even in those that are most continual of this kind, which being repeated in the manner aforesaid, will undoubtedly bring the Patient to an Apyrexia, if the constant Heat of the Bed, and the unseasonable use of Cordials have not made it a continual Fever; in which Case, I have more than once observed, that the Bark will do no good. I never found that Wine, where in the Bark is given (which one might well suspect) did any Harm to one in an Ague; but on the contrary,

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Heat, Thirst, and other Symptoms of the Ague, did presently vanish after taking a sufficient quantity of this Remedy, notwithstanding the Wine. But here it is to be noted, that the nearer the Ague comes to a continual Fever, either of it self, or by reason of too hot a Regimen, so much the more need is there of a greater quantity of the Bark; so that sometimes I have found it necessary to give an Ounce and an half, and sometimes two Ounces, before the Disease would go off.

And whereas there are some that cannot bear this Bark in form neither of a Powder, nor of an Electuary, nor yet of Pills, I give them an Infusion made in the Cold; that is, I infuse for some time two Ounces of the Bark grossly powdered in a quart of Rhenish-wine: This Liquor being several times passed through *Hippocrates's* Sleeve, is of a clear colour, and not so offensive, but that it may be taken by the most delicate Palate; four Ounces of the said Infusion having stood several days, seem to contain the virtue of one Dram of the Bark given in Powder; which because it is neither ill tasted, nor burthensome to the stomach, may be taken twice as often as any other form of this Medicine, viz. till the Fits are gone.

And sometimes it happens, that when this Disease has not come to a regular Type, the Patient, by reason of Vomiting almost continually, cannot retain the Bark in his stomach, in whatsoever form it is given; in this case, the Vomiting must first be stopt, before the Bark can be used; to which end I order, That he take a Scruple of Salt of Worm-wood in a Spoonful of the fresh Juice of Lemons, six or eight times in the space of two hours, and afterwards sixteen drops of *Liquid Laudanum* in one Spoonful of Strong Cinnamon-water; and soon after, if the Vomiting cease, let him begin the Use of the Jesuits Powder.

For Children, whose tender Age can scarce bear that this Remedy be taken in any other form, at least in such a quantity as may be sufficient to cure the Disease, I used to prescribe the following Julap.

Take of Black-Cherry-water and Rhenish-wine, each two Ounces; of the Peruvian-bark finely powdered, three Drams;

Drams; of Syrup of Fly-flowers, one Ounce: mingle them, and make a Zulap; let him take a Spoonful or two every fourth Hour, according to the Age, till the Fits go off; drop into every other Dose, if there be a Looseness, one or two drops of Liquid Laudanum.

It is to be noted moreover, that the short distances betwixt the Fits in Tertians and Quotidians, do not allow time sufficient to tinge the Blood thoroughly with the Febrifuge virtue of the Bark. Therefore it cannot be supposed, that the Sick should so certainly miss the next Fit after his taking it, as it usually happens in a Quartan, for in these, the Medicine often will not perform the promised Cure under two days time.

And you must observe, that if the Patient, notwithstanding the Caution above delivered, does nevertheless relapse, which seldomer happens in a Quartan, than in Tertians, and Quotidians, yet it will be the part of a prudent Physician, not to insist too pertinaciously upon the method of giving the Bark at the said distances, but to attempt according to his judgment the cure by some other means; to which, above the rest, the bitter decoction is generally held to conduce much.

As to Diet and other Regimen, the Sick must be neither kept from Meat nor Drink, of what kind soever it be, that gratifies his Stomach, Summer-fruits and cold Liquors only excepted, for they weaken the Mass of Blood, and are apt to occasion the return of the Ague: Let him therefore eat Flesh of easie concoction, and of good juice, and let him use a little Wine for his ordinary drink, whereby alone I have sometimes restored sick Persons, even those whose bodies being weakened with the frequent return of the Ague, have eluded the virtue of the Bark.

Nor ought the Patient unadvisedly to commit himself to the cold Air, till the Blood has obtained its prestine vigour again.

But it is to be noted here, that when heretofore treating of Agues, we admonished that the Patient was to be well purged after the Disease went off: This is to be understood only of those Agues that either went off of their own accord, or were cured by some other method, and

not by the Jesuit's Powder; for when the Cure was perform'd by this Remedy, of which we now speak, there was no need of Purging, nor truly wou'd it bear it, so powerfully does the Bark resist the Fits, and that ill disposition which they bring upon the Body; therefore all sorts of Evacuations are by all means to be avoided: for the gentle Purge, yea, a Clyster of Milk and Sugar will certainly put the Patient in danger of the return of the Disease, and perchance of Death it self.

And here it is to be remembred, that a certain great Symptom sometimes came upon these Agues the first years of this Constitution; namely, their Fits did not come with shaking and shivering, and afterwards the Fever following; but the sick had plainly the symptoms of an Apoplexy, though indeed it were nothing else, how like soever to this Disease, than the Fever falling on the Head, as was sufficiently evident by other signs, as well as by the colour of the Urine, which in Agues is commonly of a deep red, as is the Urine of people affected with the Jaundice, though not quite so red, and likewise puts off a Sediment like Brick-dust; in this case, though all evacuations of every kind seem to be indicated for the revulsion of the humours from the Brain, as is wont to be done in a true Appoplexy, yet they are wholly to be omitted, because they are very injurious in the Ague, the Original Cause of this Symptom, and moreover hasten Death, as I have known; but on the contrary, we must wait till the Fit goes off of its one accord, at which time the Bark is presently to be given, if it could not be taken before, and must be carefully repeated in the spaces, that are free from the Fits, of this kind, till the Patient is quite well.

Sometimes it happens, though very rarely, that old Men, that have had a long time this Disease, and have been unskilfully punished with Bleeding and Purging, fall into a *Diabetes*; when the Fever is perfectly cured; for their Blood weakened on this account, being quite disabled, cannot assimilate the Juices brought to it, and they are put off crude and unconcocted, by the urinary Passages, and by reason of a prodigious quantity of Urine voided as often as they make it, the strength is by degrees impaired, and the substance of the Body as it were

were washed away: In this case, as well as in every Diabetes, by which means so ever occasioned, the curative Indications are wholly to be directed to the invigorating and strengthening the Blood, and likewise to stop the Pternatural Flux of the Urine.

Take of Venice-Treacle one Ounce and an half, of the Conserve of the yellow Peel of Oranges one Ounce, of Diafcordium half an Ounce, of Ginger and Nutmegs candied, each three Drams, of Gascoins Powder one Dram and half, of the outward Bark of Pomegranates, of the roots of Spanish Angelica, of red Coral prepared, and of the Troches of Lemnian Earth, each one Dram, of Bole-Armenick two Scruples, of Gum Arabick half a Dram, with a sufficient quantity of Syrup of dry'd Roses, make an Electuary: let him take the quantity of a large Nutmeg in the Morning, and at five in Evening, and at Bed-time, for the space of a Month, drinking upon it six spoonfuls of the following Infusion.

Take of the Roots of Elecampane, Masterwort, Angelica, and Gentian, each half an Once, of the Leaves of Roman Wormwood, white Horehound, of the lesser Centaury, and of Calaminth, each one handful, of Juniper-berries one Ounce; let them be cut small, and infused in five Pints of Canary; let them stand together in a cold Infusion, and strain it as you use it.

Let him be fed with Mears of easie digestion, as with Yeal, Mutton, and the like; let him forbear eating of Herbs, and all Fruit whatever, and let him drink Spanish Wine at every Meal.

That lasting and obstinate Disease, the Whites in Women, is cured almost the same way, and by the same Remedies as is the Diabetes just now mentioned; for the curative Indications are in both the same, how different so ever these Diseases may seem to be; but in the cure of the Whites, bleeding must be used once, and purging thrice, with two Scruples of Pil. Coch. Major before corroborating Medicines are prescribed; but in the whole process afterwards they must be no more used; for all sorts of Evacuations render the Virtue of corroborating Medicines ineffectual. But this by the bye,

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I thought it necessary to say thus much briefly concerning the use of the *Peruvian Bark*, for I did not intend to indulge the Poms of Remedies; and indeed they that add any thing to the Bark besides a Vehicle necessary to carry it to the Stomach, either do it ignorantly, or deceitfully in my Opinion, which any good Man shou'd abhor, and shou'd be drawn to such a Fraud by no private advantage, he being part of the common Nature. As to what remains, if Men had pleased to turn to what I had written four years ago in the History of accute Diseases, (which I also knew before that time) viz. in what manner the Bark was to be given in the spaces betwixt the Fits, and how it was afterwards to be repeated, when the Sick recovered, perhaps not a few of those had been living which are now dead, how much soever men contemn'd my endeavours for the publick good, and despised the Admonition there delivered in the following Words, wherein are briefly contained those things, which have been treated here largely, viz.

But great care must be taken, that the Bark is not given too soon, namely, before the Disease has somewhat wasted itself (unless the weakness of the Patient requires, that it should be given sooner) for it is not only to be feared, that it should be rendred ineffectual by the too early use of it, but also lest it shou'd endanger the Patients Life, if a stop should be suddenly put to the Blood, whilst it is endeavouring its Despumation with all its might. In the next place, no part of the febrile Matter is to be drawn away by Purging, much less by Bleeding, that the Bark may perform its business the better; for by either of them the Oeconomy of the Body is weakened, and so the Fits may more readily and certainly return. When the Virtue of the Powder is gone, it seems to me more beneficial to Tincture the Blood leisurely with the aforesaid Medicine, and a good while before the Fit, than to endeavour at once to hinder the Fit just approaching, for by this means the Remedy has more time to perform its business thoroughly, and then the Patient is freed from the danger that might happen by a sudden and unseasonable stop, by which we endeavour to oppress the Fit, that is now about to exert it self with all its Might. Lastly, the Powder is to be repeated in such short Intervals

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of time, that the Virtue of the former Dose be not wholly spent before the other is given; for by the frequent Repetition a good habit of Body will be recovered, and the Disease wholly vanquished, and for these Reasons I like this Method more than any other.

Take of Jesuits Powder one Ounce, of the Syrup of red Roses two Ounces; mingle them; let the Sick take the quantity of a large Nutmeg Morning and Evening daily of those days the genuine Fit does not come, till he has taken all the Confection, and let it be repeated once in a Fortnight for thrice.

But though the Bark above-mentioned excels all other Medicines, which have been hitherto found out, yet in Vernal Tertians, if the Patient be of a Sanguine Constitution, and in the flower of his Age, I have observed the Cure has been performed by the following Remedies; for instance, Let the Patient be Bled in the Arm on his well day, and some hours after in the same day, give a Vomit of the Infusion of *Crocus Metallorum*, and so order the time, that the Vomit may have done working before the Invasion of the following Fit, and presently after it is off, let him enter upon the use of the following,

Take of the extract of Gentian, Wormwood, and the lesser Centaury, each two Drams, mingle them, and divide them into nine Doses, whereof let him take one every fourth hour, drinking upon it of the bitter decoction without Purgers, and of white Wine, each three Ounces.

There is another method of Curing these Tertians in poor People, who are not able to bear the Charge of a long Process.

Take of Virginian Snakeweed finely powdered one Scruple, of white Wine three Ounces; mingle them, let the Sick take it two hours before the Fit, and being well covered with Cloaths, let him Sweat there or four hours, and let it be repeated twice, when the Fit approaches.

The following Year, namely 1679, at the beginning of July, the same Fevers returned again afresh, and increasing daily, raged very violently in August, and were very destructive; but having now treated largely of these, I will add no more, only that they gave way to a new Epidemick depending on the manifest disposition of the Air in November; for at the beginning of November Coughs entred, that were more Epidemical than others I observed in other years, for they seized almost all in every Family; some of these did not much require Physick, but others did so violently shake the Lungs, that the Sick did sometimes Vomit up what was in his Stomach, and was giddy by reason of the violence of the Cough. On the first days most commonly, the Cough was dry, and brought up nothing; but when it continu'd a while, a little Matter was expectorated: In a word, upon the account of the little Matter that was expectorated, and the violence of the Cough, and the duration of the Fits, it seemed like the Convulsive Cough of Children, only it did not rage so violently: But in this it exceeded the Convulsive Cough, viz. it invaded the Sick with a Fever, accompanied with the usual Symptoms of it, which I never yet observed in Childrens Coughs.

Though Coughs usually are troublesome at the beginning of Winter, yet all wondered that they were so very frequent this year: And I suppose it chiefly happened for this reason; October being more rainy than usual, for indeed, it was almost continually raining, and Mens Blood agreeing with the Season, sucking in plentifully crude and watry Particles, and Transpiration through the Pores being hindered by the first coming of the Cold, Nature endeavourd to cast them out by the help of a Cough, through the Branches of the Arterious Vein, or as some will have it, through the Glands of the *Afferent Arteria*. I was well satisfied, that the Cure must be performed, when there was occasion of a Physician, both by Evacuation, by Bleeding and Purging; nor can the superfluous Particles of the Serum be so commodiously effected by any other Method, as by bleeding and purging, which do mightily empty the Veins. As to Pectoral Remedies, besides that they please the Patient; I do not see what good they do in removing the cause of the Cough;

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Cough; for their main business is either to thicken the Matter, when being too thin it cannot be spit up, or to make it thin, when by reason of its Clamminess it is difficultly Coughed up; this I am sure of, much time is wasted to no purpose about these things, and that sometimes the Mass of Blood is so much weakened by the retention of the Particles of *Serum*, that they are offensive to Nature, and that moreover, the Lungs provoked by the Cough are so shaking by the violent, and almost continual Motion, that a Consumption is often occasioned, from whence the Sick ought to be freed by hastening the Cure; nor are *Sudorificks* much safer used, by the use whereof, the Sick sometimes falls into a *Fever*, and sometimes also the Particles of the Blood, that are easily inflamed, are thrust upon the *Pleura*, and so a *Pleurisie* is occasioned, which through the Course of this *Epidemick* Cough happened to a great many Men, and was very dangerous. Wherefore I took a moderate quantity of Blood from the Arm, and applyed a large and strong Blister to the Neck, that some part of the Peccant Matter might be carried another way; afterwards I gave daily a gentle Purge, viz. *Sena*, *Rhubarb*, *Manna*, and *Syrup of Roses Solutive*, till the Patient was quite well, or till the Symptoms were very much lessened; or if Pills pleased the Sick better, I ordered him to take two Scruples of the *Pil. Coch. Major*, every day at five in the Morning, and to sleep after them.

And with this Method, viz. By Bleeding and Purging, and by this alone the Childrens whooping Cough is cured, which is otherwise very lasting, and almost incurable. What others are able to do in this case I know not, I am sure I have spent much time to no purpose, in trying various, and almost all kinds of Medicines; but only gentle Purges must be used, and they must be taken by spoonfuls according to the Age, which gentle Evacuation cures this Cough, as I suppose, because though not much serious Humour is found in the Lungs, yet hot and spirituous Vapours being transmitted from the Mass of Blood to the Lungs, at set times, occasion these violent Fits of Coughing in Children, and the violent force of these upon the Lungs can scarce be so well stopt or prevented by any other Method, as by this, whereby a Motion contrary to

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the former, to wit, by the Bowels, turns the cause of the Disease.

But in Epidemick Diseases, of what kind soever they are, if they have newly seized the Sick, great care must be taken, that he be not purged before Bleeding; for the Diseases that depend on an Epidemick Constitution of the Air, are either Fevers, or upon the least occasion turn to them, for the Fever is easily kindled by the Tumult, raised in the Blood and Humors, by the gentlest Purge, and by the heat that follows it, which otherwise Nature had carried off by the accustomed Evacuations of the Morbifick matter; as in a Cold, or in the Epidemick Cough, of which we now treat, or in a Looseness, when a Fever raging Epidemically is disposed to it. The same may be said of any other Constitution of the Air, wherein the Body is determined to some certain kind of Fever, which does not always actually invade, but by the Guidance of kind Nature, the Fomes of the Disease is cast out of the Blood, by the help of some Evacuation, that is agreeable to its Genius. This I constantly affirm though it be the custom to give Purges before Bleeding, or which is worse, that being wholly omitted; although it may be objected, that the Feculencies lodged in the first Passages, are carried to the empty Veins as often as Blood is drawn before Purging; yet it is most certain that the Evacuation which goes before Bleeding, can no way compensate the injury, brought upon the Blood by the Tumult raised by the Purge, and it cannot be denied, that a Purge taken presently after Bleeding, works much gentler, and does not stir and heat the Blood so much as it uses to do, when it has been used before Bleeding; and I suppose not a few, especially Children, have perished by reason this was either unknown, or neglected, and this is very manifest to me by much Experience: Experience, I say, the best Guide, by whose Laws and Rules, unless Physick be exercised, it were better there were no such thing; for the Life of Man is too much trusted with, when on this hand Empericks, that are ignorant of the History of Diseases, and the method of Cure, set up only with Receipts; and on the other hand, vain Triflers, that place all their hope in Speculations, and so both destroy more than the Diseases would,

if they were left to themselves. But that is Practice, and that alone will help the Sick, which draws its curative Indication from the very *Phænomena* of the Diseases, and confirms them by Experience; by which means the great *Hippocrates* obtained his height; and if by this method the medical Art had been delivered by any one, though the cure of one or two Diseases might have been known by any of the common People, yet the whole Art would then have required more skilful Men, than now it does, nor would it have been any whit degraded thereby; for there is much more subtilty in the Operations of Nature, on the Observation wherein true Practice is founded, than is found in any Art that is supported by the best *Hypothesis*, and the medical Art, which Nature teaches, would much more surpass an ordinary Capacity, than that which is taught by Philosophy. Fevers will confirm what I say, which take up two parts in three of the Physical Practice, and I appeal to any one, that is but moderately thinking, whether I speak true or no; for which of the most ignorant Quacks will confess himself unfit to cure this Disease, if according to the common Opinion, these two Indications are only to be minded, viz. that the Matter occasioning the Disease be ejected by the help of *Sudorifics*, and that care be taken to remove those Symptoms which come upon such Evacuations; for he is very sure that *Venice-Treacle*, Compound-powder of Crabs-eyes, and the like, taken inwardly, together with a hot *Regimen*, will force Sweats, which is all he proposes to himself in the cure of this Disease, especially if he has been acquainted with the word Malignity; and as to mitigating the Symptoms, he has *Diacodium* in readiness to cause sleep, when the Sick cannot rest; and a Glister when the Body is bound, and so of the rest; but he is not able to understand of himself, nor by his File of Bills, what sort of Fever that is, which he endeavours to cure, if we believe (future Ages perhaps will believe it) that there are various sorts of Fevers, where each requires a method of cure different from others, and moreover, that one and the same Fever, whatsoever it is, requires one way, when it first breaks out, and another a little contrary through all its degrees, as long as it lasts. And by what means shall he

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that is ignorant of the natural History of the Disease collect the curative Indications of this or that *Phenomenon*, that is not very remarkable; (for the History of the Disease can only shew the true method of cure) for he cannot judge whether this or that *Phenomenon* proceeds from the Disease, or from his method of cure. A day would scarce suffice to reckon up the various Subtilties which are to be observed in the curing of this and other Diseases, and there being so many things, and of so great moment required to free Men from Death, there will be always room for Posterity to add something to those Observations, wherein is delivered almost the infinite Variety of Operations of Nature in the Production of Diseases, and the curative Indications are enumerated which are drawn from the same Fountain. The Art wou'd not therefore become contemptible, if things of this Nature were published, but be rather more illustrious, and being render'd more difficult, none wou'd be accounted legitimate Physicians, but such as were wise and of a sound Judgment. But this by the bye.

The Coughs aforesaid, if they were ill managed, occasioned a Fever like that which raged so Epidemically in the Winter, in the Year 1673, an account whereof I gave in the fifth Section, Chap. 5. of my Book of acute Diseases; but this Fever only proceeding, and being an affect of the Epidemick Cough, I cur'd it by the same method, which was used for the Cough above described, namely, by bleeding, by applying a Blister to the Neck, and by purging thrice: for tho' in a Cough without a Fever no time was set, how long the Sick shou'd be purged; for as I noted above, it is to be continued till the Sick was either quite well, or till the Symptoms were much lessened; but in the Fever, which proceeded from the Cough, purging ordered for three Days was sufficient to quell it, which I have often observed in the Constitution we now treat of.

But here it is to be noted, that tho' this Fever when it first began was accompanied with troublesome Defluxions on the Lungs, yet after a Month or two, when the heap of the *Serum* was leisurely ejected from the Blood, the Fever was plainly of the same Nature, tho' it was not accompanied with any Cough, (the impression of an ill
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Disposition remaining yet in the Blood) and therefore it did not require a Cure different from that which the Cough accompanied.

But this Fever continued in the same manner we have said till the beginning of the Year 1680, wherein I wrote these things, at which time also, as the Year preceeded, Agues began to appear, and from that time, till the beginning of the Year 85, in which I publish this Edition, they continued the same; for now tho' they are not so Epidemical in this City, as they were the first four Years, and are also milder; yet in other places here and there, they rage as much, and are as violent as before; and the general Constitution does so much favour Agues to this very Day, that I can affirm, that for this time I have not observed one continual Fever, unless by ill management it was made so; nor was there one of these I call Intercurrents, tho' they most commonly come every Year, so mightily inclined was this Constitution to produce Agues, and the force of it undoubtedly must be abated before that which I call the depuratory Fever can rage Epidemically; for in the species of Agues Nature seems to make too much haste, and to run through, by reason of the quickness of its motion, the seasons of preparing the Morbifick Matter, and of its depuration, too soon, which is otherwise in the depuratory Fever, wherein the signs of the concoction of the Febrile Matter to be ejected, sometimes by Sweat, or rather by plentiful Transpiration, do not appear before the thirteenth or fourteenth Day. These things being well considered, without doubt those depuratory Fevers, which reigned in the Years 61, 62, 63, 64, were, as it were, the *Feces* of some Agues, which raged before that time for a certain Series of Years, (but how long they prevailed I do not know) for when the Constitution, which favoured Agues began to grow mild and old, the Fevers which it afterwards produced were more humoral, and earthy; and for that reason, they were slower in putrifying the Blood, whereas those in the first Years of the Constitution were founded upon more subtile Principles, and being Intermittents, were wont to run their Course quickly. Now if things are so it seems probable to me that this Fever, I mean Depuratory, will return as soon as this present Consti-

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Constitution a little abates, and that it will continue for a certain Series of Years, before the Plague breaks out. But through all these Years how many soever they shall be, wherein this Fever shall rage, Agues may now and then exert themselves; and perhaps sometimes for a short while become Epidemical, namely, when some manifest quality of the Air shall favour them. I cannot say whether the Peruvian Bark will as certainly cure this Fever, as it does the Agues that are now; but in curing the Plague, and continual Epidemics which will orderly follow this, no other effects are to be expected from it, than those we now find in a Pleurisie, *Peripneumonia*, *Angina*, and such like inflammatory Fevers, wherein it does not only do no good, but is plainly injurious. But however it be, one Epidemick will succeed another for the future, in the way we have said, if Nature keep the same order she has observed for these twenty four Years last past.

And this is in a manner all, worthy Sir, which I have observed concerning the Epidemick Diseases of the Years last past. As to the cure of a Rheumatism, for of that you inquired also, I have often been troubled as well as you, that it could not be performed without the loss of a great deal of Blood, upon which account, the Sick is not only much weakened for a time; but if he be of a weakly Constitution, he is most commonly rendred more obnoxious to other Diseases for some Years, when afterwards the Matter that causes the Rheumatism falls upon the Lungs, the latent indisposition in the Blood being put into motion by taking cold, or upon some slight occasion. For these reasons I endeavour to try for some other method different from bleeding, so often repeated to cure this Disease; therefore well considering that this Disease, proceeded from an inflammation, which is manifest from other *Phænomena*, but especially from the Colour of the Blood, which was exactly like that of Pleuriticks; I thought it was probable, that this Disease might be as well cured by ordering a simple, cooling, and moderately nourishing Diet, as by bleeding repeated, and those inconveniencies might be avoided, which accompanied the other method, and I found that a Whey-diet used instead of bleeding did the business.

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After the last Summer, my Neighbour *Mathus* the Apothecary, an honest, and ingenious Man, sent for me; He was miserably afflicted with a Rheumatism accompanied with these Symptoms; he was first lame in the Hip for two Days, afterwards he had a dull pain upon his Lungs, and a difficulty of breathing, which also went off in two Days time; afterwards his Head began to pain him violently, and presently the Hip of the Right-side, which was first seized, and afterwards according to the Course of the Disease, almost all the Joynts, both of the Arms and Legs were afflicted by turns; he being of a weak and dry Habit of Body, I was afraid, that by taking away much Blood, his strength before but infirm, would be wholly vanquished, especially the Summer being so far spent, it was to be feared, Winter would come before he could recover his Strength wasted by frequent bleeding, and therefore I ordered, that he should feed on nothing but Whey for four Days; afterwards I allowed him besides the Whey, White-bread instead of a Dinner, namely, once a Day till he was quite well; he being contented with this thin Diet continued the use of it eighteen Days, only at last I indulged him Bread at Supper too, he daily drank eight Pints of Whey made at home, wherewith he was sufficiently nourished. After these Days, when the Symptoms did no more vex him, and when he walked abroad, I permitted him to eat Flesh, namely, of boiled Chickens, and other things of easie Digestion; but every fourth Day he was dieted with Whey alone, till at length he was quite well, the inconveniences which I mention'd above being remedied by this method, with which he was grievously afflicted ten Years before, bleeding being then used by my order for his Cure, and often repeated.

If any one shall condemn this method, because it is plain, and in-artificial, I would have such a one know, that only weak people despise things for their being simple and plain, and that I am ready to serve the Publick, tho' I lose my Reputation by it; and I will say, that I do not at all question, were it not for common prejudice, that the said method might be accommodated to other Diseases, the Names whereof I conceal at present, and that it would be more beneficial to the Sick than the com-

mon Pomp of Remedies, that are used for People; when they are just a dying, as if they were to be sacrificed like Beasts.

And that those things, which are counted vile and of no worth, may serve to free Men from Death, when they are managed by a skilful Physician, I will shew by one Observation; which, tho' it have no relation to the Disease we are now treating of, is not wholly different from the Scope I propose. Two months ago, one in my Neighbourhood desired me to visit his Servant, who had taken a great quantity of Mercury sublimatè, that was melancholy upon the Account of Love; I came about an Hour after the poyson was taken, and the Mouth and Lips were very much swelled, and he was violently sick with a burning Pain in the Stomach, and was almost killed with Heat; I ordered that he should drink three Gallons of warm Water, as soon as possibly he could, and that as often as he vomited he should fill his Stomach again with it; I also ordered that his Bowels should be washed with warm Water without any thing else, being plentifully injected; when he first perceived by Gripes, that the Poyson went downward, the Wretch obeyed, being now very desirous to live, and drank more Water than I ordered; his Friends that were by, learn'd of him, that the Water which he first vomited was very acrid, by reason of the poysonous Salt; but that which was from time to time vomited up was less acrid, till at length it became insipid, and the Gripes were taken off by the Water-glisters, and without any more ado, by the Blessing of God he recovered in a few Hours, only his Lips did not presently assuage, and his Mouth was yet ulcerated by the Particles of the Poyson, which were brought up with the Water by vomiting, but these Symptoms went off in four Days time by a Milk diet; only, I preferred the Water before Oyl, (which ignorant People are wont to throw away with their Pains) and any other Liquor, because it being very thin, it seemed to me fitter to absorb the saline Particles of this Poyson, than any other Liquor, that was thicker, or impregnated before with Particles of some other Body.

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But to return to the Rheumatism, how convenient soever a Milk-diet may be for young Men, and for those that have lived Temperately, and by measure, yet it is not safe to treat People in years with this Method, or such as have been for a long while too much addicted to Wine, and other spirituous Liquors; for it injures such Mens stomachs, and by reason of the great Chilness it brings upon the Blood, it makes way for a Dropfie; therefore in this Case, it is best to cure the Patient almost in the same manner I have set down in Chap. 5. of the sixth Section of my Book of acute Diseases, tho' since I wrote that, I have found by experience, that it is better after the second, or at most after the third Bleeding to give Catharticks often, and to repeat them, till all the Symptoms go off, than to do all by Bleeding; for Purging assisting Bleeding in the cure of the Disease, the business may be carried on without a great loss of Blood, and besides by this means, there will be room for Paregoricks, from which otherwise we must abstain, how great soever the pain should be; for by them the Disease is fixed, nor does it so easily yield to Bleeding. But those Purgatives are to consist only of Lennitives, as of *Tamarick*, *Sena*, *Rhubarb*, *Manna*, and *Syrup of Roses solutæ*, whereas others made of *Scammy*, *Falap*, and the like, cause a Tumult and heighen the Pain. At Bed-time every Night after the Purge has done working, you must give an Ounce of *Diacodium*, somewhat earlier than is usual.

But here it is to be noted, that I have observed a certain Symptom, sometimes like a Nephritick pain, as to the intollerable Pain of the Loins, which being wont to follow Agues, arises from a Translation of the Febrile matter upon the Muscular parts of the Body; but this Symptom requires no other Method of Cure, than the Ague whereon it depends, for it is heightened by frequent Bleeding, and any other Evacuation, and the Patient's life is endangered thereby. I thought good to mention thus much of this Symptom, that it might not impose on any one.

And these things, worthy Sir, are what I have observed of the Diseases, you inquired about, and if they shall please you and profit others, I have my Desire; however I have done what I could to perform my Duty.

S I R,

Your Devoted Servant,

Tho. Sydenham.

To my very good Friend, the Learn'd
Dr. Sydenham.

Worthy Sir,

THE Art of Physick has been much improved by your excellent History of acute Diseases, established by diligent Observation, and faithful Experience, not written to gain Money or Fame, but with great Integrity and Honesty; for you only endeavour to perform your Duty, and to be every way beneficial to the present Age. I have hitherto concealed what I was much desirous to do; but perhaps others at a greater distance have done it before me; he that praises what you do, urges that you should do something, for which you may be further praised. It is the greatest difficulty to treat of acute Diseases, for they pass so swiftly, that unless they are stoppt opportunely, the Life is in extreme danger, and it cannot be relieved after by any help; you have observed all the Moments of them, and what is necessary to be done in every juncture. Indeed your Works are so perfect, that nothing could be added to them, if you had not promised more, viz. of Chronical Diseases; these will bear a truce, and allow time to be examined and judged of.

We have often heard of that abominable Disease the French-pox, the ignominious Original whereof the European Nations carefully endeavour to cast from themselves, and that the Foot-steps of it may be more obscured,

red, they banish it to the most distant *Indies*. It is a very fit punishment for Whores for their exorbitant and untameable Lust; and it is perhaps the harder to be removed, that the Repentance for it may be the more severe; and he seemed to be touched with a Sense of Humanity, and of Sin together, who openly wished, that this filthy Disease should be but once cured. But seeing now the Cure of it is chiefly managed by Mountebanks and Empericks, and the like, they either by Fraud, or Unskilfulness, so long deferr, and protract the Cure to the great charge, and greater trouble of the Sick, that he is very weary of his Life, by reason of the Severities, and the tediousness of the Cure, and may count it better to be sick, than to be cured; therefore I friendly claim your promise, and intreat you, that if you have any thing to say of this matter, you would publish it first, as an earnest of the rest, and that you would kindly and candidly shew, by what method and by what means, he that is seized with this Disease may be soonest cured. It is enough for the Sick to be punished by God; it would be hard if he should be punished more by the Physician. This would be well received by many, and I shall receive some part of the Thanks, because such a Treatise so much desired was published at my request.

S I R,

Your Humble Servant,

H. Paman.

*To the Learned Dr. Henry Paman, Fellow of
St. John's College in Cambridge, University
Oratour, and Professour of Physick in Gre-
sham College, London.*

Altho', worthy Sir, you are pleased in civility and kindness to me, to term my Book of acute Diseases perfectly accomplished, yet I am so sensible of my own

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weakness

weakness, and of the imperfection of that Treatise; that I count, I have only chalked the way, whereby others of better parts may find the Knowledge, and Cure of the said Diseases.

----- *Fungor vice cotis acutum.*
Reddere quæ ferrum valet; exors ipsa secundi.

And truly so various, uncertain, and delicate, as I may say, is Nature, and so does she vary in producing Diseases, that it is not in the power of one Man, how long liv'd soever he is, to describe particularly the various *Phænomena* of them, and their proper Cures: One Man did I say? Ten Men may certainly be well employ'd, succeeding one another for so many Ages, and also of excellent parts, and unwearied industry, and very conversant in Practice, so far am I from thinking that I have obtain'd the Art of Physick, or ever shall.

Mecum habito, & non sit mihi curia supellex.

As to these Chronick Diseases, which I promised to write of, I am so very earnest to do it, that if I know my own mind, I do not so much desire to live upon any other Account as upon that, that I may be serviceable in some sort in this respect to Mankind. But I every Day see how difficult and hazardous a Task it is, (especially for me, who have not Abilities enough for such an undertaking) for among Physical Writers, if you except *Hippocrates*, and some very few others, scarce any Footsteps can be found whereby I might trace thro' these impassable ways, obstructed with so many Difficulties; for the lights and helps, which Authors promise, are rather *Ignes-falsi*, than true lights; which rather misguide to Rocks and Precipices, than direct for the finding the Genuine method of Nature; for most of their Writings are built upon Hypotheses proceeding from their own Fancies; and the very *Phænomena* of Diseases, of which the History of them consists, as they are described by these, are modell'd in the same Shop of Suppositions, and the very Practice, wherewith they undertake Diseases (which is the certain Plague, and Destruction of man, kind)

kind) is suited to this kind of *Postulata*, and not according to the truth of the thing; so reigning are these mens Whimies, almost in every Page. And in the mean while the Directions of Nature are slighted: And yet notwithstanding if God shall grant life and leisure, I will try what I can do: For the present, that you may see, how ready I am to serve you, I offer this short Treatise of the French-Pox, which I have only as yet fitted for the Press, as a Specimen of the whole.

But first I must acquaint you, that I have met with several, that have affirmed (either upon a good design, that they might fright incontinent Persons from sin, by the fear of following Punishment, or because they would be thought very Chast) that the cure of the French-pox ought not to be taught: But I do not agree with them, because there would be scarce any room left for Charity, or for doing good turns, if those mischiefs, which unthinking People do bring upon themselves by their own fault, were not to be kindly remedied; it belongs to God Almighty to punish the Guilty, but it is our Duty to help the miserable, as much as we can, and to cure the Sick, and not to search too nicely into the cause, or to vex them with our Censures; I will therefore deliver, what I have observed, and what I have try'd in this Disease; not that I design to make Men worse, but to cure their Bodies, which is my business.

The French-pox came first from the *West Indies* into Europe; in the Year 1493, for before that time, the name of it was not so much as known amongst us; upon which account the Disease is commonly thought to be Epidemical in those parts of *America*, where we first planted our Colonies. But it seems rather to me to have taken its rise from some Region of the Blacks near *Guinea*; for I have learn'd from many of our People of good Credit, who live in the *Caribbe Islands*, that the Slaves brought from *Guinea*, even before they land, and also those that live there, have this Disease without impure Copulation, so that often a whole Family, Man, Wife and Children have it; nor does this Disease which often afflicts these miserable People any way differ from the French-pox, as far as I can understand, as to the Pains, Ulcers, and the like, respect Being had to the diversity

of Climates, though the name is quite different; for they call it the *Taws*; nor does the method of Cure, which they use, differ from ours, for Salivation does the business every where; notwithstanding what we say of the great Virtue of *Guaiacum*, and *Sarsa Parilla* in the places where they grow, which are thought in a manner to lose their Virtues in the long passage to us; it seems therefore probable to me, that the *Spaniards*, that first brought the Disease into Europe, were infected with it, by the Contagion of the Blacks bought in *Africa*, to some Nation whereof it may be Endemial; for there are many People that border upon *Guinea*, among whom that barbarous Custom of changing Men for Ware prevails. But however it be, this contagious Disease creeping on by degrees, so infected these parts of the World, that if it had went on with the same Celerity it began, it wou'd have destroyed mankind within few Ages, or confined them to an Hospital, and made them wholly unfit for those Offices, whereby humane Society is preserved; only like Vegetables, being as it were transplanted from its own Country into another, it does not so much flourish in *Europe*, but languishes daily, and the *Phenomena* grows milder; for when it first came over, when any one was seized with it; it presently contaminated his whole Mass of Blood, with dreadful pains of his Head and Limbs, and shew'd it self in Ulcers in various parts. But it is an hundred years ago since it shew'd it self first in the Species of a virulent *Gonorrhoea*, and does so still, endeavouring to go off that way, and it has no other manifest Symptom, only in a very few a small Ulcer in the Privities, commonly called a *Shanker*, is the first sign of the Disease, the venom whereof, because it cannot be carried off by a *Gonorrhoea*, invades and infects the Blood presently.

This Disease is propagated either by Generation, and so the tender Infant is infected by one of the Parents, or by the touching of some soft part, whereby the Virulency and Inflammation insinuate themselves into the Body, upon occasions to be mentioned in this place; first in Sucking, for instance, either an Infant may infect the Nurse through the Pores of the Teats, or the Nurse the Infant by its tender mouth. And Secondly,
Children

Children by lying in bed naked with those that are infected; for tho' those that are full grown, whose flesh becomes firm by Age, can scarce be infected if they lie together, without impure Coition, yet the tender Flesh of Children easily receives the infection, which I have observed more than once in Children lying in bed with infected Parents. But, Thirdly, the touching of a soft part, especially in impure Coition, and by this way especially the Pox is conveyed; for the Yard being turgid with Spirits appointed for Generation soon sucks in the Infection from a venereal Ulcer, or Pustle in the sheath of the Womb. Either of which lying hid within, the Woman notwithstanding may seem well; namely, the venom being so detained by the moisture of those parts, that it slowly invades the Blood; or is oftner diluted, or in some sort ejected by the monthly Purgation. This Contagion in my opinion first seizes the fleshy Substance of the *Glans*, and corrupting it first occasions an Inflammation, and then an ulcerous Disposition being induced by degrees, it causes the *Sanies*, which we see in a *Gonorrhoea*, to drop gently into the *Urethra*, and I am induced to believe it is so, because I have seen this kind of virulent Matter sweat out of the porous Substance of the *Glans*, and not cast out of the *Urethra*; and there has been no Ulcer either in the *Glans* or *Prepuce*; but at length penetrating deeper, it causes an untoward Ulcer in the *Prostata*, which is often seen in the Bodies of such as die of this Disease.

This Disease proceeds according to the degrees to be mentioned by and by, the Sick (sooner or later, according as the Woman with whom he had Conversation has been more or less infected, and according to the Constitution which is more or less disposed to receive the Infection) is first seized with an unusual pain in the Genitals, with a certain Rotation of the Testicles afterwards, if he be not Circumcised, a spot first like the Measles coming out, as to the colour and bigness, seizes some part of the *Glans*, and presently after the rise of this Spot, a Liquor distills gently like Seed, which daily receding both from the colour and consistence of Seed, grows at length Yellow, but not so deep coloured as the Yolk of an Egg, and in a more virulent and in-

tent Pox, it is not only Green but mixed with a watry Humour much tinged with Blood; the said Pustle turns at length to an Ulcer, which is at first like the *Aptha* in Childrens mouths, which eat daily deeper and wider, and the Lips become callous and hard, but it is to be noted, that the Pustle now mentioned is seldom accompanied with a *Gonorrhoea* in those who have either before had a *Gonorrhoea*, or are Circumcised, for their *Glans* being hardened by being often exposed to the Air, and by being frequently rubbed with Rags, does not so easily receive the Infection; and therefore those that are so Circumcised are scarce ever troubled with this Ulcer of the *Glans*. A *Gonorrhoea* is occasioned only in this manner, other Symptoms presently follow this, as first a great sense of pain in the Yard as often as it is erected, and it seems as if it were prest with a strong hand, this chiefly happens in the Night, when the Sick begins to be hot in his Bed; and this painful Constriction of the Yard in this State of the Disease, I count the *Pathognomonick* sign; the Yard is also bowed by a Contraction of the bridle, which being according to its Nature stretched in the Erection, occasions a violent pain; there is moreover a heat of Urine, which most commonly is scarce perceived in making water, but presently after the Patient is violently pained through the whole Duct of the *Urethra*, especially at the *Glans*; and sometimes also, the *Urethra* being excoriated by the continual Flux of sharp Matter, and Nature being over officious in breeding new Flesh, substitutes a certain loose and Spongy Flesh, which growing daily bigger and harder makes Caruncles, which to stuff the Urinary passages, that at length the Urine cannot pass, and these Caruncles also emit a certain Ichor from little Ulcers growing upon them, and much obstruct the Physician in the cure, and miserably afflict the Sick. Moreover it happens often, that the *Sanies*, which ought to be carried off by the *Gonorrhoea*, being cast upon the *Scrotum*, either by reason of violent Motion, or by the use of Astringents, occasions violent pain, or an Inflammation of the *Scrotum*, sometimes one, sometimes both sides being much swelled; the *Gonorrhoea* in the mean while proceeds but slowly, but the heat of Urine

is as bad as ever; and these are the common Symptoms of this Disease during this State of it.

But, when by reason of the continuance of the Disease in the said parts, the Contagion is carried up, and by degrees infects the Blood, or when the Humours putrefie, because the virulent Matter is retained in the Body by the undue use of Astringents, the true Pox is occasioned, wherein Tumours or Bubo's often appear in the Groin, and constitute the first degree of it; grievous pains torment the Head, and the Limbs betwixt the Joynts, the Shoulders, Arms and Legs, they come in no order, and by Intervals, tho' most commonly they come as soon as the Sick is warm in his Bed, and continue till towards Morning, there are also Scabs and Scurff in various parts of the Body, and these are most commonly as Yellow as an Hony-comb, and by this Sign they may be known from all others, and sometimes they possess various spaces of the Body with their large Superficies, like a Leprosie described in Physical Books; and the more this Itch is diffused, the less it troubles the Sick; all the Symptoms increase by degrees, especially the pain, and it is sometimes so very sharp, that the Sick cannot keep his Bed, but is forced in a restless manner to walk about his Chamber till Morning. Moreover by reason of the violence of the pain, the Skull, and the Bones of the Legs and Arms grow up in hard Nodes called *Exostoses*, like the Spavin in Horses feet, which Bones, that have Nodes on them, by reason of a continual Pain and Inflammation, become at length carious, and purrefie. *Phagedenic* Ulcers also seize various parts of the Body, and most commonly begin in the Throat, and are propagated by degrees to the Cartilage of the Nose, thro' the Palate, and soon consumes it, so that, wanting its Supporter, it falls. The Ulcers and Pain increasing daily, the Sick is devoured by the Ulcers and Putrefaction, so that he lives a grievous Life by reason of the Pain, Stink, and Scandal, which is much worse than any Death; but at length one Member rotting after another, the torn Carcass is hid under ground, being very odious before to all above.

As to the intrinsic Nature, and Essence of this Disease, as they say, I count I am to seek for it no farther,

than

than as it appears by the Symptoms we have described, no more than I am obliged to search into the Essence of any Plant or Animal; but whatever it be, I am sure, that the Humour occasioning it partakes of no small Inflammation, from whence proceeds all the ill; and it is also manifest that the said Humour ought to be evacuated by such means as by Experience the guide of Physicians has been found effectual, there being yet no immediate Specifick found out, whereby without any foregoing Evacuation, the Pox may be cured; for neither Mercury, nor the drying Woods can be counted Specificks, unless it can be proved that Mercury without Salivation, or a decoction of the Woods without Sweating, have sometimes cured the Pox; and as I have found by Experience, common Sweats do as much good in this Disease, as a Decoction of the Woods; so I do not at all doubt, if any thing could be found out, either among Vegetables or Animals, that could raise Salivation as well as Mercury, it would cure the Disease as well. But for as much as this Disease being yet only a *Gonorrhœa*, is much different from that which has contaminated the whole Mass of Blood, and deserves strictly speaking the name of the French-pox, so also the Evacuation, whereby the matter of a *Gonorrhœa* is ejected, is quite different from that whereby a confirmed Pox is cured.

Therefore as to the *Gonorrhœa*, whereof we first treat, the whole business of the cure, so far as I have hitherto found, is performed by purging Medicines, by the help whereof the peccant matter is either evacuated, or a diversion of the natural Juices of the Body, is procured, which would otherwise feed the Disease. But tho' reason and experience dictate, that this Disease may be cured by any sort of Purge given often and a long while, yet they seem most powerful, which Purge strongly from the Blood Choler, but especially the serous Ichor, and therefore I have sometimes cured poor People, where respect was to be had to their Poverty, only with the Jalap-root. And because this Disease is plainly accompanied with an Inflammation, and the purging Medicines wherewith it is cured, are also hot, a cooling Diet must be ordered through the whole Course.

I therefore use to prescribe in the following manner.

Take of the Mass of the Pills of Coch. Maj. three Drams;
of Extract of Radium one Dram, of Rosine of Jalap,
and Diagrydium, each half a Dram; with a sufficient
quantity of Opobalsam, make six Pills of every Dram.
Let him take four of these every Morning at four or five
a Clock, and sleep after them; for twelve or fourteen
days, or more, namely, till the heat of the Urine, and
the yellow Colour of the Matter that is like Seed are
much lessened, and afterwards I count it sufficient to
purge the Patient every other day for a Fortnight, and
then the Pills may be used only twice a Week till the
Matter that is wont to drop from the Urethra quite
stops, which most commonly does not happen till after
a long while; for tho' it be commonly affirmed, that the
Ichor after the heat of Urine, and the yellow Colour
of the Matter disappear, which is seen, especially in
the Morning at the top of the Yard, a drop or two be-
ing press'd out with the Fingers, proceeds only from
weakness, and a Laxity of the parts arising from the
long continuance of the Venom on them. Yet the
poor Patient finds to his great Damage, that it is the
Relicks of the Disease not quite destroy'd: for tho' it
be in some sort quelled, yet upon any slight occasion;
namely, by drinking too much, or by any violent Exer-
cise, or the like, it begins afresh, and the Gonorrhea
returns, if the Sick has left Purging, before the Disease
was quite Eradicated.

If after such Purging, the Gonorrhea does not cease, it
will be convenient, instead of the Pills, especially for those
that are difficultly purged, now and then to give some
stronger Purge, as is the following Potion, which taken
only once, has sometimes done more to stop a Gonorrhea,
than gentle Purges given often.

Take of Tamarinds half an Ounce, of the Leaves of Sena
two Drams, of Rhubarb one Dram and an half; boyl
them in a sufficient quantity of Fountain Water, to
three Ounces of the strained Liquor; add of Manna,
and

and Syrup of Roses solutive, each one Ounce, of Syrup of Buckthorn, and Electuary of the Juice of Roses, each two Drams; mingle them, make a Potion; or if the Cure does not go on well, give eight Grains of Turkish Mineral, only twice or thrice; (but there must be a due distance betwixt each time, lest a Flux should rise) and this Remedy is indeed the chief for Eradicating an obstinate Gonorrhea; or twice in a Week the following Pills may be given.

Take of Pill ex duobus half a Dram, of Mercuris Dulcis one Scruple, with a sufficient quantity of Opobalsam; make four Pills to be taken early in the Morning.

But sometimes the Sick does so nauseate repeated purging that he cannot so much as bear the sight or smell of Remedies, and sometimes by a certain Idiosyncrasy the Body does so obstinately resist purging, that a due quantity of the Matter cannot be evacuated; and whilst this is earnestly endeavoured, without any advantage, the Pox creeps on, and very often comes upon those, whose Bodies strongly resist purging. When the Case is so, we must proceed with Glysters, by injecting which, we may answer both Indications, viz. Of purging off the Humour, and of making Derivation from the part affected. And moreover, this Method is quicker than the other above-mentioned, but not safe in my Opinion; for tho' the former required longer time, yet there is less danger, that any part of the contagious Matter shoud stick to the Bowels, and so cause new Troubles: But this inconvenience may easily be avoided, if, Purges taken every day, Glysters are not used, assist them.

Therefore I proceed in this way; I take care that the Pills above-mentioned, or the like, be given for three Mornings following, and afterwards I order the following Glyster to be injected daily at five in the Afternoon, till the Symptoms quite cease, only once or twice a Week I order a Purgé, and for that day omit the Glyster.

Take of the Electuary of the Juice of Roses six Drams, of Venice Turpentine dissolved in the Yolk of an egg half

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half an Ounce; mix them with a Pint of Barley-water; to the strained Liquor add two Ounces of the Electuary called Diacatholicon: Mingle them, make a Glyster, and every Night at Bed-time, I allow him to take twenty five Drops of Opobalsam, or of the Balsam of Mecha, in a lump of Sugar.

And this Medicine indeed being a Liquid and pure sort of Turpentine, and of the same Virtue, is very proper for the Ulcerous Disposition of the *Genitals*; and therefore for want of it, the quantity of a Hazel Nut of *Cyprian Turpentine*, may be substituted to be taken at the same times.

In the process of the Cure, whatever Method is used, the Sick must abstain from all salted and spiced Meats, and others of hard Digestion, as Beef, Pork, Fish, Cheese, Roots, Herbs, and Summer-Fruits, and instead of them, he must eat Mutton, Veal, Rabbits, Chickens, and other things of easie Digestion, and I would have him eat sparingly of these, and only to much as will suffice to keep up his Strength; I forbid the drinking of Wine in general, and all spirituous sharp Liquors, and I would have him drink Milk-water, made of three parts of boyl'd Water, and one of Milk: only at Dinner and Supper, he may drink a little small Beer. And moreover, to attenuate the Inflammation, and to mitigate the heat of Urine, I order some cooling Emulsion made after the following manner, to be drank frequently berwixt the Purges.

Take of the Seeds of Melons and Pumpions, each half an Ounce, of the Seeds of white Poppies two Drams, of Sweet Almonds blanched number eight, beat them together in a marble Mortar, pour upon them gently a Pint and a half of Barley-water; to the strained Liquor add a sufficient quantity of Christalline Sugar, make an Emulsion.

In a very Sanguine Constitution, and when the Disease is obstinate, after having purged a Month or thereabouts, I order that Eight or Nine Ounces of Blood be taken away from the right Arm: but I would not have Bleeding used before, lest the Contagion should be more rooted

rooted thereby. I do not much stand upon Injections into the *Urethra*, because most commonly they do more hurt than good, by reason of their Acrimonious Biting, or Stiptick Qualities, but towards the end a little Rose-water may be injected. This method always succeeded well in curing a *Gonorrhea*, and I have not hitherto found a better, especially in those that are easily purged; for in such as are difficultly purged, the Cure though it never fails, yet it requires a long time before it can be perfected. In these therefore Bleeding must be repeated, and the Purges quickned, and also oftner repeated, and the use of them must be longer continued, or Glysters must be used in the manner above mentioned, for purging does all in this Case, and it is truly affirmed in this Case, if in any other, that he that cleanses well, cures well, if he forbear Mineral Waters, which I am very well satisfied retain the Relicks of the Disease, which should be ejected out of the Body, and by reason of their Astringent, and over Sanative Virtue keep it in, and root it more; upon which Account I have often observed Swellings in the *Scrotum*, when they have been drunk in the beginning or state, and worse Symptoms, when they have been used towards the end, and this I confidently affirm, notwithstanding they are usually, and frequently prescribed in this Case.

I am not ignorant how much some Practitioners boast of curing this Symptom in a shorter time, by Remedies that perform it, which have a great Name, yet I have certainly found by too frequent Observation, that the stopping up of the Matter by Astringents, which ought to be ejected, has been very prejudicial to the Sick, and thereby it returns very often to the Mass of Blood, and occasions the Pox at length, nor is there more success, though less danger, by the use of Decoctions of the drying Woods; for under the pretence of Specificks, the whole Body, but especially the Parts affected, which were too hot before, are more inflamed, and sometimes, as I have observed, the *Gonorrhea* which a little before disappeared, returned again.

But it is to be noted, that if the *Glans* be covered all over with the *Præpuce*, and the Lips of it are so hard, swelled, and callous, that by reason of the Inflammation,

it can by no means be drawn back; he strives in vain to cure the *Gonorrhea* by purging Remedies, how strong soever they be, and tho' he repeats them daily until they become nauseous, unless at the same time he endeavour that the part affected be reduced to its natural State, the hardness and swelling being removed, whereby the *Gonorrhea* was continually furthered, I endeavour the Cure, with the following Fomentation.

Take of the Roots of Marshmallows and of Lilies, each one Ounce and an half, of the Leaves of Mallows, Mullein, Elder, and Henbane, of the Flowers of Camomile and Mellilot, each one handful; of the Seeds of Flax and Fenugreek, each half an Ounce; boil them in a sufficient quantity of Fountain-water, and make a Fomentation to be applyed to the part affected for the space of half an hour twice or thrice a Day.

After the use of the Fomentation, anoint the part affected with Linseed-oyl fresh drawn, and then apply the Plaister of Mucilages spread upon Leather, upon the swell'd Lips of the *Prepuce*. But if the Ulcer, either of the Lips of the *Prepuce*, or in the Glans under it occasions the sticking by its Callosity, so that the *Prepuce* is difficultly drawn back; besides the Fomentation above mentioned, I order the following Liniment.

Take of Basilicon six Drachms, of Ointment of Tobacco two Drachms, of red Precipitate washed in Rose-water, and finely powdered half a Drachm; mingle them, make a Liniment, spread it upon Lint, and apply it always to the Ulcers after the use of the Fomentation above prescribed.

But when either by reason the *Gonorrhea* was stopt too soon, or by violent Exercise, or from any other Cause, the *Scrum*, now the Seat of the Disease, is much swelled, I order the foresaid Fomentation to be applied twice a Day to the part affected, and if the Pain and Swelling do not lessen, I order the Pultis commonly known made of Oxyerat and Bear-flower. While these things are done without, I also endeavour to cure the Disease by

Purges and cooling Remedies, and with the Diet above-mention'd, nor do I make any scruple to bleed at any time of the Disease, and to take away nine or ten Ounces from the Arm of the Side that answers to the swell'd Testicle; if the greatness of the Swelling and the violence of the Pain require it; and so much for the *Gonorrhoea*.

But when the Disease has so far prevail'd, that it comes to a confirm'd Pox, we must proceed quite another way, and in such a difficult Case we must use Remedies suitable to it; and truly I think no instance can be produced where this Disease was eradicated any other way than by Salivation with Mercury, whatever some learned and unlearned Men say of the Cure of it by other means. Seeing therefore Salivation does all, all that I have to do is to set down what reason, and observation approving reason, dictates concerning the raising and governing it.

But first, I cannot imagine to what purpose, we are so frequently admonished to take a special Care, to prepare the Body well with purging and digesting Remedies, bathing for instance, and the like, to say nothing of bleeding, which some count the chiefest thing; whereas if we were to dispute for the truth of the matter, this must be the question, *viz.* that if Salivation is to be procured by Poison (for we do not as yet know any wholesome Medicine, whereby it may be raised, nor can the Sick be cured without it) whether it is better to use it when the Body is strong and brisk, and so abler to resist the Enemy, or when it has been weakened by bleeding, and a low Diet; without doubt any Judicious Person will think it is better to do nothing than to do hurt, by being so unseasonably busied; and moreover Experience testifies that those bear Salivation better, that have not been weakened by Evacuations, or any other way, than those that have been weakned before the Conflict.

Therefore all this insignificant flourish being laid aside, as soon as I am called I prescribe an Ointment made of two Ounces of Lard, and one Ounce of Quicksilver, nor do I mingle any of the hot Oyls on any thing else, for the Ointment is made worse if that which is added hinders its Operation, and it is made no whit more effectual,

if

if it does nothing at all; and perhaps those things which are added under the Name of Correctives do the same (if they do any thing at all) as things added to Purges have been found to do; namely, they cause Gripes, and render the Operation more difficult, by reason of the strife which is betwixt the Antidote and the Cathartick, the whole Virtue whereof is inimical to Nature. But I order that the Sick anoint with his own hand his Arms, Thighs, and Legs, three Nights following; but he must neither touch his Groins nor his Arm-pits, and his Belly must be carefully defended from the Ointment by a Flannel wrapt about it, and sew'd behind. After the third Unction, his Gums most commonly swell, and the Salivation rises, but if within three Days after the last Unction it does not rise, then eight Grains of Turbith Mineral may be given in Conserve of red Roses, and after every Stool or Vomit let him take a Draught of hot Posset-drink; when he begins to spit, all the Physician has to do is to observe carefully the degree of Salivation, lest by using too many things the Salivation shou'd be raised so high, that the Life of the Sick will be endanger'd, when the Salivation is come to a due height, that is most commonly, when two Quarts is spit in the Space of a Night and a Day, or if the Symptoms vanish, tho' he spit less, which most commonly happens four Days after the Salivation comes to its height, his Shirt, and Sheets must be changed, and those must be used, that have been worn a while, after they were last washed, for the other being daubed with the Ointment, will heighten the Salivation, and make it continue longer than is necessary. But if the Salivation abate before the Symptoms disappear, it must be heightened by giving now and then a Scruple of *Mercurius Dulcis* for a Dose.

Sometimes it happens, especially in Bodies that are easily moved, that after the first or second Unction, viz. as soon as the Blood begins to be affected with the Quick-silver, Nature presently endeavours to expel the Enemy through the Bowels, and not only slimy Stools and Gripes happen, as in those that have the Bloody-flux; but the Cure of the Disease is also hindered, which is wont to yield only to Salivation. In this Case, we must presently abstain from the Use of *Mercury*, either inwardly or outwardly,

wardly, till these Symptoms quire go off; and moreover the Looseness, which most commonly happens before the Salivation rises well, must be stopped by *Liquid Laudanum*, and you must so increase the Dose, and repeat it, as the Symptom urges, or you may give a Drachm and an half of *Diascordium* sometimes upon occasion. The Looseness being at length stopp'd, the Salivation, which before scarce appeared, usually proceeds well.

The Sick beginning to grow well, only that his Mouth is yet ulcerated, (which is the genuine Fruit of Salivation) the Salivation which is now daily lessened must be neither stopp'd by purging or any other way. For it may happen, that after the Pain is ceased, and the Ulcers dried, somewhat of the Disease may lie hid in the Body, and may occasion new Troubles, unless that moderate Spitting be permitted, which will go off when the Man, after he is well, has a while exposed himself to the free Air. I suppose therefore it is dangerous to divert what yet remains of the Salivation, that is about to go off of it self, either by purging, or by drying it up by a Decoction of the Woods; by which Practice, which is commonly used to drive the Mercury out of the Body, or to correct its malignity, the frequent relapses are undoubtedly occasioned in these miserable People, who earnestly expect at length Health, after all their Charge and Pains, and they had certainly obtained it, if the Salivation had been let alone to end of it self. It is therefore much more advisable to promote the Salivation by giving *Mercurius Dulcis* once a Week, after they are quite well, and go abroad (which I have sometimes done for some Months) than to stop it too soon.

But though I dislike purging at the Declination of the Salivation, for the reason above-mentioned, yet it may happen, that it must and ought to be used at the State of it, namely, when by ill management it has been so much heightened, that the Patient's Life is endangered, in which Case it is not only safe but necessary to depress it by a Purge, to that degree the Sick can bear, and then it must be left to its self. If any one should ask whether we ought to be contented with Salivation alone, neither using Purging, nor any other customary Remedies, after it is gone off; I answer, that besides those things now spoken of which

which reason and experience confirm; I would fain know for what reason it is more necessary to purge after Salivation, than to flux after Purging; seeing purging Medicines, (especially Medicines of *Scammony* and such acrid things) leave something of malignity in the Body, which we leave to Nature notwithstanding, and by it at length is subdued, whatever remains of the Poyson; he that was purged returning to his accustomed Course, Exercise, and the Use of the free Air. And moreover I would willingly know how it comes to pass, that we endeavour to carry off the Reliques of Mercury by purging, when by it we do not only neglect, but also hinder Salivation, which is the genuine, and almost the only method, whereby Nature is wont and ought to effect it? But such mistakes are to be imputed to those small sparks of reason, wherewith we poor Mortals are only endowed, and not penetrating to the truth which lies deep, we embrace every Shadow, and instead of *Juno* embrace a Cloud, as they say, and then by discoursing with one another we so root ill-founded Prejudices in one another, that at length we would have our Dreams and mad Fancies pass for Demonstrations, a Specimen whereof, unless I am decived, is now before us.

But tho' the Cure may be perform'd in the way above-mention'd in most, *viz.* by Uction used for three Nights following, and by giving Turbith-mineral, if the Flux does not proceed well, and also *Mercurius Dulcis* sometimes, if it abate too soon; yet it must be carefully noted, that in some, there is a certain peculiar *Idiosyncrasie* or Temperament both in respect of Salivation, as well as Purging, (and most commonly those that are difficultly purged, are also difficultly fluxed) so that in some the method above mentioned will scarce make the Gums sore, much less procure that Salivation, which is sufficient to eradicate the Disease. In such Patients, the Physician must take great Care, that he do not too obstinately, and unseasonably urge Salivation, Nature resisting and abhorring such a kind of Evacuation, which being not well understood by some, they have kill'd many; for in Bodies so disposed, as often as Medicines whether external or internal have been obstinately repeated, instead of a perfect Salivation, nothing but Gripes, and

Dysenterick stools can be obtained, Nature endeavouring to carry off the Poyson of the Quicksilver this way, or else Pains in the Stomach, Sickneis, cold Sweats, and other dreadful Symptoms are occasioned, so that the Sick is just a dying, or does die. Tho' it may be lawful for the Physician to repeat the Uction, and the Turbith-mineral again, after he has expected Salivation in vain four or five Days from the last Uction; (some Days passing betwixt each Uction) yet he ought to take a special care, that he do not sollicite in vain a Salivation, with so much eagerness, that he persist to force it against Nature's inclination; and therefore in my Opinion the Physician is to observe this method, viz. as soon as ever he perceives the Sickneis of the Stomach, or the Gripes, he must presently forbear the giving Medicines, till those Symptoms are quite gone off; for by many and strong Remedies, heaped upon one another to force Salivation against Nature's inclination, a Dysentery will certainly follow the Gripes, and Death the Sickneis of the Stomach; whereas on the contrary, if you go on gently, and take time, and give a Scruple of *Mercurius Dulcis* once or twice a Week, either by it self, or with a Drachm of *Disascordium*, if the Sick is inclined to a Loosneis, you will at length do your business, and cure the Patient; for though the Salivation never rises to the height, yet the Sick will spit more than he uses to do, and the Stink, the Companion of a right Salivation, will also accompany this small Spitting, so that it appears, that the Blood and Humours have attained that Putrefaction or Alteration, whatever it be, which either occasions the Salivation, or is produced with it, and by this method, you may cure all the Symptoms of this Disease, if you allow a due Time.

But it is to be noted, that tho' Salivation is much better for the curing of a confirmed Pox, than any other Medicine whatever, yet it cannot cure a *Gonorrhoea* when it accompanies the Pox, nor will that stop, when this is quite cured; from whence we may well gather, that there is no specifick Virtue in Mercury, whereby it immediately cures the Pox; tho' perhaps it may be counted a Specifick mediately, in as much as it cures the Disease by raising Salivation, but it is almost as improper, as I have

have mentioned else where, as to call a Lancer a Specifick for a Pleurisie. But to return to the business, when the Pox and a *Gonorrhoea* are lodged together, the Cure of the *Gonorrhoea* is to be attempted before the Salivation, or when it is over; but in my Opinion it is safer and better done after the Salivation is over; for being accompanied with the Pox it is more difficultly cured: but after Salivation being somewhat tamed, it is usually cured with less trouble, but you must be sure to avoid Purgings, as long as any thing of the Salivation remains; wherefore the business will be better done, by giving a Dose of Turbith-mineral once or twice a Week, than by any other Purges: for by it the Spitting will be somewhat promoted, and in the mean while, the Matter occasioning the *Gonorrhoea* will be evacuated by degrees.

Moreover it is to be observed, that if there be a Tumour upon any Bone, commonly called an *Exostosis*, which has continued so long, that the Bone is become carious, it is altogether in vain to attempt the Cure, either by Salivation, or by any other method, unless care be taken of this Swelling; wherefore the Bone must be laid bare by a Caustick, and the Exfoliation of it, as they call it, must be endeavoured by proper Remedies.

As to the Ulcers of the Mouth, which are very common in such as are fluxed, if the Pain is so violent that the Sick cannot bear it, or if the Mouth be so excoriated, that the Blood flows Night and Day, the Mouth must be often washed with Damask Rose water, or with Milk-water, or with a Decoction of Barley, of the Roots of Marsh-mallows, and the Seeds of Quinces; and this is the only Symptom worth notice, that happens in Salivation, if it be well managed. And indeed if the pain and Ulceration of the Mouth could be any way prevented, the Cure of this Disease would be no more troublesome, than of others, that are not near so much taken notice of.

As to the Diet and other *Regimen*, they should be altogether the same in Salivation, at least till it come near the End, as is ordered in Purgings: for seeing he that has taken a Purge is only required to keep himself warm in his Chamber, and to eat moderately Meats of easie Digestion, I do not know any reason, why he that is in

a Flux should be kept constantly a-bed, or forbid to eat moderately, which may strengthen Nature in conflicting with the Poyson; for many have been miserably destroyed, Nature sinking under the Burden, and their Spirits and Strength being at length quite exhausted, by Sweating, Purging, and unnecessary Fasting, besides the Injury occasioned by the Quicksilver, and also often when the Disease is vanquished, the Sick wanting Spirits enough to recover Strength, dies of Weakness, or if he chance to escape, he is accompanied with so many Torments, that he were better dye, as a late Poet elegantly describes such.

*Graviora morbis patimur remedia,
Nec vita tanti est, vivere ut possis mori.*

As here we may readily answer that objection, how it comes to pass, that some being severely handled, to wit, in the State we now speak of, are forced to travel into *France* to recover their Strength: I think this is the reason of it; in such sick People, the Oeconomy of their Bodies being subverted, and their Strength gone, our thick and moist Air is unfit to recover them; whereas that of *France* being more healthy and clearer, is proper to recover their Spirits, and Strength, and not because the Physicians there, how learned soever they be, have a better method of Cure for this Disease, than we in *England*; but to return to the Diet.

I suppose therefore (and Experience confirms the same) that Water-gruel, Panada, Posset-drink, Small-beer warmed, Veal and Chicken-broth, and the like, may and ought to be allowed in a moderate quantity; and that as soon as the Swelling of the Gums is so much fallen, that he can bring his Teeth together, Rabbits, Pullets, Lamb, and such tender Food, may be allowed sparingly, and he may keep in Bed, or sit by the Fire as he pleases; for this Disease being to be cured by Salivation, and not by Sweating, I cannot imagine to what purpose, he or she should be punished with a great deal of Heat, when there is no necessity for it.

This method, as it is quicker, so it does not require so many Days to be wasted unprofitably, in preparing the Body

Body before Salivation, nor those frequent Purgings, nor those usual Decoctions after Salivation: So I am certain it is much easier, less dangerous, and less subject to a relapse, which any one may find, that having been accustomed to the other practice betakes himself to this. I am sure it has succeeded well with me in very many Patients, some whereof have passed Salivation more than once to no purpose, having always relapsed again, upon the occasions and reasons above-mentioned.

But I need not, candid Sir, anxiously solicit your good Opinion, who long ago thought me honest, and furthered my Reputation. I shall add no more of this Disease, for I never did, nor never shall delight in making things more difficult by many words, that the Fountain of the River Nile may be more difficultly found, as they say. But how little soever, or of how little Value soever this Treatise is, I intreat you would receive it kindly; for I wrote it chiefly for the Publick good, and to testify my respect to you: and indeed I do not flatter you when I confess, that I always valu'd your Friendship as a most precious thing; for among other things, that I have observed in the little while I have lived, this is an excellent thing, (which I would also recommend to my Son) viz. that the Acquaintance with Men, that were remarkable for Honesty, and other Virtues, have always turned to my profit and advantage; and on the contrary, Friendship with ill Men, (unless it ought rather to be called a Combination, or Conspiracy, when it is not founded in Virtue) tho' they never yet injured me, either by their words, or countenance, yet I know not how it came to pass, sometimes at length some Damage happened to me or my Affairs thereby. Farewel, kind Sir, and continue to be my Friend.

Your Devoted Servant,

Tho. Sydenham.

An

*An Epistolary Discourse to the Learned Doctor
William Cole, concerning some Observations
of the Confluent Small-pox, and of Hysterick
Diseases: By Tho. Sydenham.*

To the Worthy Dr. Thomas Sydenham.

PERhaps you will wonder, candid Sir, what impertinent Disturber hinders you in your serious Affairs: But I hope you will pardon me, when you understand, that I do this chiefly to express my Thanks; for I acknowledge, I have received so much Advantage by your elaborate Discourse, about acute Diseases, that I hold my self obliged to render Thanks. You have so accurately observed all the Constitutions of Years, and of the Air, which you have undertaken to treat of in a manner altogether new, and have proposed such genuine, and obvious Indications for the curing every Disease happening in them, and have adorned the whole Work with so much Ingenuity, that we may reasonably suppose so much Sagacity joined with indefatigable Labour, will for ever oblige the Sick, and Physicians too.

But tho' you have performed all things so exactly, that I can scarce forbear to praise you singly, for every particular, yet especially, I heartily thank you for your Method of Cure in the Small-pox, whereby that dreadful Disease, (unless some Malignity, or some unusual thing happen, may be easily cured) if Nurses, a sort of people very injurious to the Health of Man, did not obstruct, who by their hot *Regimen* and Medicines, confound all things, and kill so many before their Time. You, learned Sir, the protector of Mankind, ought to be esteemed, who are a Guide to the Sick in the greatest Danger of Life, that they may return to the way of Health, if they would follow your Direction. As to my self, tho' for some time I was afraid to trust my own Reason,

Reason, yet I have of a long while thought, that the Eruption of the Small-pox, as it was not the very Disease, but the *Crisis* of the Fever, so like other *Crisis*, it required a *Regimen*, wherein according to the Opinion of all Physicians, the whole business is to be left to Nature, if all things proceed well, as most commonly they do in this Disease, unless the Blood at first be too much exagitated. But after I had read your excellent Book, I perceived, that those Fears, which possess'd me and others so long were Panick, and I ventured according to your Precepts, (though sometimes not only the Vulgar, but Physicians opposed) to govern my Patients; and I found great advantage by them, when I had to do with those that wou'd submit; and whatsoever others think, I found my self happy, by having got so great a Treasury in my hands; and moreover, when I was called to those that had the confluent Small-pox, which was not very often, I did not doubt, tho' they seem'd to be just a dying, to fly by your Advice to *Paregoricks*, and I had wonderful Success; and indeed you have seem'd to have done so much in this Case, that I was apt to believe that nothing remained for you, or any other to do, till I lately understood by the learned Man, my very good Friend, Mr. *Kendrick*, (who much praises your Civility) that you had new Observations upon the same Subject, which I cannot but think, must needs be very advantageous in Practice, because you made them; and unless you impart them to the publick, you will be very injurious to Mankind, and to your own Fame; and therefore, if the Desires of those that are unknown to you may prevail any thing, be pleased, worthy Sir, to publish them.

Nor must I stay here, for I have heard from the same Person, that you have some choice Observations about Hysterick Diseases, which truly, as they have Exercised and wearied the Wits of the learned Physicians of all Ages, so alas! they have too often eluded the methods of cure deliver'd by them, and shew how unsafe it is to trust to Philosophy; unless in those things, the certainty whereof may be sought for by the Testimony of the Senses. You will, worthy Sir, deserve much from the present and future Ages, if you please

to publish what you think of these things; I desire at least that you would take in good part, what I, tho' unknown to you, have not blushed to ask for my own and the publick good, and that you would reckon me amongst the Number of those that are your humble Servants.

Your Devoted Servant,

Worcester, Novemb.

the 17th. 1681.

William Cole.

To the Learned Dr. William Cole.

Worthy Sir,

IF I should so far indulge Self-love, that I should take to my self those Praises, that no whit belong to me, it would be very difficult for me not to be proud, being praised so much by so famous a Man, who is known to the learned World by his excellent Works, but the Face of him not so much as known to me; but that you have been pleased to honour me so far, tho' I am unworthy, I count it your Civility, for Nature has so disposed the best, and worthiest Men, that they are not only gentle to those that are in small Errours; but that also they are ready upon all occasions to praise those that do indifferently well, whereof I gratefully acknowledge you have shewed a clear Specimen towards me, and my small Endeavours, which were designed for the publick good.

Be pleased to receive those things you ask for, which are to be added to the Observations before published of the Small-pox, and my new Treatise of the Hyfterick Passion. The first of these I therefore enter upon, that what was wanting in it before, might be supplied out of those things, which longer Experience hath suggested; But I have undertaken the other, because Hyfterick Diseases of all others occur most frequently, except Fevers; and also because, I think some Advantage may be gained by these my small Observations; tho' I must confess that there is another Cause besides the hopes of doing good to the Publick, *viz.* that I might employ my spare time well, and pass away honestly the tedious long

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Winter-Evenings; for by reason of my old Age, I cannot any longer seek Companions abroad. But whatever it was, that first provoked me, I do not find my self so fit for the Undertaking, as I hoped I should be: For that continual Series of Thoughts, which my Mind was always bent on, has for many Years been very injurious to my goury Body, especially now old Age approaches. But because I have received your kind opportune Letter, I will briefly by way of Answer write those things in short, which before I designed to treat more largely of.

I think I must mention first, that that Species of Agues, which first began, as we said in another place, in the Year 1677. reign still, namely, in this Year 1681, wherein I writ this. These Agues I say, according to the Custom of all Epidemicks, raged chiefly in those Seasons, which are most agreeable to their Natures, through all those Years, wherein they flourished. But another Season approaching they gave way presently to other Epidemicks, whereunto that was most favourable; for instance, at the coming of Winter, they always gave place to the Cough, and the Peripneumonick Fevers proceeding from it, and also to the Small-pox: but in the Spring they returned again; so in the Year 1680, after the Ague had raged all the Autumn, the Small-pox succeeded in the Wintertime, and raged every where; but in 1681. the said Agues began again, but they were not altogether so Epidemical as before, upon which Account the Small-pox broke out here and there with them. But when Summer began the Small-pox increased daily, and at length were Epidemical and were very destructive.

That which Reason dictated heretofore was clearly manifested to me in the year 1681, to wit, that the Patient was not to be confined to his Bed, Night and Day, before all the Pustles appeared; for the Spring-time, and Summer continuing longer dry, than was ever known in the Memory of any that was then living (so that for the most part the Herbs were every where burnt up) and almost all that Humidity was wanting, which the Air used to communicate to the Blood, upon which account the Small-pox then raging, were accompanied with a greater

Inflam-

Inflammation, than they were wont to be, and the other Symptoms arising from thence, were more violent; and it was for this reason also, if I am able to judge, that the Purple Spots many times came before the full Eruption of the Pustles, and that the violent Inflammation that forced them out, destroying the *Crisis* of the Blood, occasioned the sudden Death of the Patient, before there was a due Expulsion of the Morbifick matter; and they were the more fatal, because the Pustles did so easily Flux for the reason above-mentioned; for now the Intemperance of the Air, of its own accord, did that mischief, which ignorant Quacks use unluckily to do, at the beginning of the Disease, by a hot *Regimen* and Cordials, for (which is diligently to be noted) after the most exquisite Observation, the chief of all is, that in the Small-pox, the greatest safety proceeds from the Paucity of Pustles, and the most danger from the fulness of them; and as they are few or numerous, so the Patient lives or dies; yet we must confess, that a Bloody Urine and Purple Spots, which are the most certain Forerunners of Death, sometimes happen, when there is scarce any sign appearing of the Small-pox, or but very few Pustles coming out; and as these generally accompanied the Pox that fluxed most, so now and then they invaded so very early, that they killed the Patient before the full Eruption, as we remarked before.

I think it is very easie to give an account, why the Patient is more or less endangered, according to the greater or lesser number of Pustles; for every Pustle is a *Phlegmon*, tho' very small, and presently Impoſthumates, and therefore it cannot be imagined, but that the Secondary Fever, that depends on the Matter which is now a making, is more or less exasperated at the State of the Disease, according to the quantity of the Matter to be Concocted, which is usually performed in the gentleſt Flux-pox, on the Eleventh day, reckoning from the first approach of the Disease; in the middle sort on the 14th day, but in the severest kind on the 17th day; for whereas, (which is to be noted) the Flux-pox is as much more dangerous than the distinct, as the Plague than the Flux; so also the above mentioned three kinds, are more dangerous one than the other, which also respects as well the Age as the Sex; for every one knows, that a
young

young Man in the flower of his Age is much more in danger than a Woman or Boy ; but this is by the bye.

Neither truly will he wonder, why so great danger should proceed from a great number of Pustles, who considers with himself, that if any one has a Boyl on the Arm, or any other part, he will be Feverish when it comes to Matter ; for the Blood being intruded by the purulent Particles sucked into its Mass, by the Veins in Circulation, occasions the Fever : how much more reason then has a Physician to prognosticate the Death of the Patient, on one of these days above-mentioned, when at the beginning of the Disease, he sees his Face all covered over with small Pustles, like the dust of the Filings of Needles, and that by reason of the extream violence of the Fever that follows, which necessarily rages according to the quantity of Matter cast out of those innumerable Impoſthumes into the Blood, which plainly discovers the destruction of the Patient, some days before it falls upon him, though for the present he thinks himself pretty well, and seems so to be to those who stand by, who do not understand this Disease.

Wherefore, if the Patient be not otherwise in danger, (to omit for the present the Bloody Urine and Purple-spots) than by the great number of pustles, I diligently consider upon what account they came out so full, and I endeavour all I can safely to restrain them, which indeed is the main business, and the best means to help the Patient, for it is very hazardous to do any thing in this sort, when the Disease is established; and if the Patient should chance to survive, its not so much from my care, as either from a notable *Hæmorrhage* of the Nose, or some other Fortuitous change which happened to the Disease ; but the most profuse Eruption of the Pustles, as I conjecture, arises from too hasty an Assimilation of the variolous Matter, which seems chiefly to happen, either because the Nature of the Patient is too hot, and spirituous like a Cordial, or because the Sick has heightened the Fermentation, either by confining himself to his Bed too soon, or by taking hot Cordials, or any other spirituous Liquor, by all which means the Blood is disposed to receive the Impressions of the Disease ; and Nature being so highly intruded by reason of the Exuberant

rant Plenitude of the variolous Matter, endeavours to change the whole Substance of the Body into Pustles.

But the immoderate Assimilation of the variolous Matter, is no way more readily promoted, than by confining the Patient unseasonably to his Bed, to wit, before the Sixth Day, or the fourth inclusively from the Eruption, at which time all the Pustles appear, neither are there more to be expected.

And tho' the moderate heat of the Bed, even after those days are past, does a little occasion the Phrensie, Watchings, and other Symptoms, yet these are such as may be subdued by Medicines judiciously prescribed, whereas the great danger of Life, which comes on the Eleventh day, occasioned by the innumerable Pustles, exceeds the help of Physick.

Therefore here I seriously admonish, that the Patient by no means confine himself to his Bed in the day time, if he would avoid the great conflux of Pustles, till towards the Evening of the sixth Day, by which he will find himself very much refreshed: Afterwards he will be scarce able to rise at all, if the Concourse of Pox be considerable by reason of the sharp Pains of the Pustles, and because he is more enclin'd to Fainting, at sitting up, which when I had often observed, it came into my mind, that Nature, according to the Custom of the Disease, did first point out at the time, when the Patient was continually to be kept in Bed.

But that I may not only confirm the truth of the foregoing Problem, which is of so great moment in lessening the impending danger from the Small-Pox, but also that in handling them, I take along with me our account from the beginning to the end, I think it will be proper to draw as it were a Scheme of the whole Disease, and diligently to consider what is its Nature, and what the method; so that at length we may be able to discern the thing clearly, according to the Judgment of men, that use the most faithful Observations, not by Opinion built on the uncertain Foundation of Fancy.

First therefore its Essence, as much as we can learn the Essences of things, seems to be comprehended in a certain Inflammation of the Blood, in which Nature is bu-
 gied for some Days, at first in preparing and subduing the in-

inflamed Particles, so that they may be the easier thrust forth to the outward parts of the Body, at which time the State of the Blood being disturbed, it is necessary there should be a Fever; for the incensed and raging Particles roving tumultuously through the whole Province of the circulating Blood, necessarily occasion Sickness of the Stomach, Lancing Pains of the Head, and all other Symptoms that precede Expulsion, as in their Motion they are driven on this or that part. But when triumphing Nature has driven out the rebellious Particles to the habit of the body, the rest of the Tragedy is acted in the Fleishy Parts, as before it was in the Blood, and as Nature knows no other Method than a Fever to cast out the peccant Matter from the Blood, so also does she free the carnos parts from any extraneous thing, by no other way than that of an Imposthume: for instance, if perchance a Thorn, or some such thing, stick in the Fleish, the circumjacent Parts are presently imposthumated, unless that which is offensive be presently drawn forth; therefore when these Particles have lodged themselves in the Fleish, they cause Phlegmons not very visible, in which they abscond, which increasing hourly, and growing more inflamed, and angry, at length they come to Matter, at which time it cannot be but some of the Matter will be sucked into the Mass of Blood, as it returns in its Circular Motion by the Veins; and if a great quantity of it be poured on the Blood, it does not only produce a Fever, which the Patient's strength is not able to bear, but it also poysons the Mass of Blood, and yet this is not the worst, for by the intense Heat of the Fever, stirred up in these last days, by the two great force of the Matter, the Salivation, which ought to be an inseparable Companion of the Flux-pox, is too suddenly stoppt, and so the Patient dies immediately. But if the purulent Matter be sparingly received into the Blood, the strength of Nature easily depresses the violence of the Secondary Fever, and the Pustles dying off daily more and more, the Patient soon recovers.

If this be the true and exact History of this Disease, he deserves to be blind, who will not see how that the whole event of it, as to either part, depends on the Foundation of the Cure well or ill laid at first; for if these

hot and spirituous Particles are provoked by the use of hot things, and especially by keeping the Bed continually, it is necessary that the Assimilating faculty (to which before they were too much inclined) should be heightened and increased. Moreover, the Blood and other Humours being heated by these means, they easier yield to the violent impression of the Particles, so that more Pustles break out than are requisite, and the Patient is put in danger of his Life, when there is no necessity for it; whereas the opposite and moderate cooling *Regimen*, and the free use of the Air, not only quenches the burning Particles, but also condenses and strengthens the Humours, so that they are more able to resist the Morbifick Spirits, and to bear their violence; and so there is no greater quantity of variolous Matter, than what was agreeable to the Nature of the Disease.

Neither does he suffer this Inconvenience only, that is confined to his bed too soon, *viz.* That too great a quantity of the Morbifick Matter is assimilated, and that the Ferment of the Disease is overmuch heightened; but most commonly bloody Urine and Purple-spots, especially in Summer, and in those that are yet in the flower of their Age, are occasioned also by the same. If I be not mistaken, both these Symptoms arise from the heat and fury, into which the Blood is put, by the hot and spirituous Particles, by which being exagitated, and greatly attenuated, it breaks out of the Vessels; when it rushes in upon the Kidneys it causes bloody Urine; when it is percolated through the Extremities of the Arteries, terminated in the Muscles and Skin, it occasions Purple-spots, which are like so many Mortifications in those places in which extravasated Blood is coagulated; and tho' these two Symptoms might have been easily prevented at the beginning of the Disease (at which time they chiefly shew themselves) by a cooling *Regimen*, and Diet; yet when they actually appear, he will be as much mistaken, who endeavours to cure them by keeping the Patient in Bed, and by giving Cordials, as an Old Woman would be, that should strive to hinder the boiling of her Pot, by putting more Fire under it.

But to speak the truth, let the Dogmatical, and those that are ignorant of this matter, and therefore incompetent

petent Judges, say what they will, it is not only dangerous to keep the Patient in Bed continually, but truly sometimes it is necessary to allow him the open Air, *viz.* if it be Summer, and he has not past the flower of his Age, or has accustomed himself to spirituous Liquors, and especially if the Disease was occasioned by excessive drinking; indeed I think in these Cases too hasty an Eruption of Pustles can scarce be restrained enough by keeping from Bed, and abstaining from Cordials; for the Blood without the help of these, is so over-stored with hot Spirits of the same Nature with the Disease, that the violent Explosion of it is unavoidable; and besides, so great a quantity of Humours will turn to Pustles, that the Patient being as it were overwhelmed by the abundance of Matter flowing back upon the Blood, must necessarily perish at the latter end of the Disease.

But most commonly the Ferment immoderately exalted, adds so great violence to the variolous Matter, that the Patient dies at the beginning of the Disease, *viz.* when the Matter that produces it, cannot extricate it self and come out, by reason of the inordinate and confused Motion stirred up in the Blood; instead of which, bloody Urine and Purple-spots put an end to the Tragedy: which also often happens in the Measles and Scarlet Fever, when they are unseasonably forced out.

Neither does Bleeding, as I can find, tho' it be used early, so effectually restrain the Assimilation of the variolous Matter, as the temperating of the Blood by the Air sucked in, especially if the Patient be put to Bed presently after Bleeding, and be injured by hot Cordials; for by these means, the Blood is more inclined to receive the impressions of the Adventitious heat, than it was before Bleeding; and I solemnly declare, that almost the worst Disease of the Flux-kind I ever saw, and which killed the Patient on the Eleventh day, happened to a young Maid, after she had recovered of a Rheumatism by the usual Method, *viz.* by a large and repeated Bleeding; and from hence I learned, that Bloodletting did not so much conduce to the restraining the Small-pox in their due Bounds as heretofore I imagined, though I have very often observed, that purging repeated before the Blood is infected, often renders the Small-pox more distinct and favourable.

I am very sensible, that many things may be objected against this Opinion, of keeping the Patient up a days; and those of no small moment amongst the ordinary sort of People, and others that are little acquainted with this Disease, to whom vulgar Physicians are wont to appeal as fit Judges, that by their Authority they may underprop their ill built Theorems; and indeed such better suit with their Capacities, than those that are maturely contrived by more searching men. Hence it follows, that the far greater part of Mankind, being fitted to take up things only upon trust, but very few able to fathom the depth of them, that the unlearned prevail over the more understanding sort of men, who are commonly calumniated, yet they endure it patiently, having truth and the best, tho' fewest of men, on their side. First it is objected, that keeping from the Bed at the beginning of the Disease, hinders the Eruption of the Pustles, and by consequence the Sickness and other Symptoms arising from thence, are protracted; and this I do not at all deny, and experience daily testifies the same: but it ought to be considered, whether it be more dangerous somewhat to suppress the variolous Matter, and upon that account to protract the Sickness a little, which is occasioned by its not coming out; or on the other hand, by too much provoking the Ferment of the Disease, and Assimilating so great a quantity of the variolous Matter, that the Patient be brought to the jaws of Death by the Secondary Fever on the Eleventh day. I believe it will appear, if the thing be rightly weighed, that very few have heretofore died, because the Pustles did not come out sooner or later, unless perchance in some of those, whose Blood being enraged, by too great heat and inordinate Motion, had not leisure to cast out gently the Morbifick Matter, which makes for me. For we need not fear, tho' we do nothing, the variolous Matter (how much soever it flies about at the beginning of the Disease, and wearies all the parts it falls upon, from whence proceed these Symptoms, violent Vomiting, and pains in various parts, &c.) Yet at length they will be tamed by nature, and extruded to the habit of the Body, especially the Patients Body being bound hitherto for the most part, gives good assurance that the Eruption of the
Pustles

Pustles will be certain, tho' late; but on the contrary, in what great hazard is the Patient, when the Pustles are unseasonably thrust out, it would be too tedious to mention them all, I will only handle the chief now, and they are these: First, the number of the Pustles being too much increased, the Fever coming towards the later end of the Disease, is more or less dangerous, according to their number. Secondly, the bloody Urine and the Purple-spots, both which arise from the extravasated Blood too much thinned, and raging, by reason of great heat, breaks out through the Vessels. Thirdly, as we said before, a total Suppression of the due Eruption, is sometimes occasioned by being over-officious in hastening it, by which the design of the Physician is as much frustrated, as he would be, that should endeavour to call out a great number of Men, contained in a large House orderly, one after another, by flinging a Squib amongst them, which on the contrary would so disturb them, that all endeavouring to come out at once, the passage would be so wedged up, that they would all be shut in.

If any one should ask me, why a due Separation of the various Matter cannot as well be performed at the beginning of the Disease, by cherishing the Patient with the moderate heat of the Bed, as by taking him out of it? On the contrary I demand, whether experience does not testify, that any one a-bed in the Winter time, moderately covered with Cloaths, without Fire, is not hotter than if he were taken out of his Bed, and well cloathed in the same Chamber; but if the difference be very manifest, then I would enquire in the next place, which of these methods is likeliest to suppress the immoderate Motion of the various Ferment, at which, if I am able to judge, the Physician should chiefly aim at the beginning of the Disease, and the more or less he wanders from the same, so it will be well or ill with the Patient.

But this chiefly has imposed upon the unwary in this Case, to wit, that they have observed that the Patient of his own accord is inclined to Sweat, which continually flowing as long as he keeps his Bed, the feverish Heats are very much abated, otherwise than in those that did not sweat. Therefore let us consider, why we do so much endeavour to restrain the Fever, whereas that is Nature's

usual Instrument, which she chiefly uses in preparing and casting out all offensive Matter that lies hid in the Blood: Why who does not perceive, that while we diligently provoke Sweat to lessen the Fever, at the same time we force out a crude and indigested Humour, like over-early Fruit: And by these very Sweats, we afterwards occasion a violent Fever; for by this means the *Serum* of the Blood (with which the Blood it self, and those hot new bred Particles are diluted) is driven out, and in the mean while, these Particles wax violent, because they are now freed from the *Serum*, which was exhausted by Sweat. In a word, the lessening of the Fever and other Symptoms by Sweat, and the Pustles for this reason being too hastily thrust out, happen ill to very many, who die upon this account on the Eleventh Day.

But it is to be noted, that I keep the Patient from his Bed at the beginning of this Disease, only when upon supposition that the Small-pox coming out, are of the Flux-kind; for as to the distinct sort, if it can be certainly known, as there is no necessity to keep the Patient continually in Bed, so neither to force him from it, for the fewness of the Pustles, secures him either way.

But I do not flatter my self so much, as to think that these things which I have here treated of, should be believed upon the Authority of my Judgment; which I know is very small; and truly I have accounted always the Opinions of almost all sorts of Men to be so uncertain, and of so little Weight, that I may always very well suspect my own, when it is contrary to the Sentiments of others; which I also should do here, if practical *Phænomena*, did not as it were with one Consent, confirm the Dictates of Reason; for without practical Observation, that which seems reasonable to me, or any other Person, perchance will be nothing else, but the shadow of Reason, or a Phantasm, that is, mere Opinion; and the oftner I converse with Men, I am the more confirmed how dangerous it is, even for those that are the most acute, to wrack their Brains, and as it were inflame them, in the Search of any Art or Science, unless they constitute matter of Fact, as Judge and Umpire of Truth and Falshood: And such great Opiniators, as *Cicero* says, infinitely wander from Truth, in controversies

lies purely speculative, whereas he that applies his Mind only to those things, which may certainly be determined by Practice, if he should chance to have a false Opinion, would be soon set right, by proving the Idea's of things, which he has conceived in his Mind by this Touch-stone. For in this our business, may not I observe what *Regimen* chiefly produces a favourable, or cruel sort of Pox, and so frame an Opinion in my Mind suitable to what appears? And if others would practise the same, I should be satisfied; but it is extremely unjust to defame me as an Impostor, when they never try'd so much as once in their whole Lives, whether the method so often repeated above, of keeping the Patient up a Days, does either good or hurt. If this cavilling Humour had heretofore prevailed over those that found out Truths, though contrary to common Opinion, no Man would have endeavoured for any thing, which being found, would have been useful to Mankind; and truly why should I thus trouble my self, if often repeated, and almost daily experienced, did not proclaim, that this method was much more safe, than the vulgar one? I am not so very mad and foolish, to seek for Fame by exploding the Opinions of those, which if I courted applause, were to be flattered; neither can it be thought I am so desperately malicious, as to conspire the Ruin of those that are to be born many Ages after I am dead, by the Reputation of this my Method, if it has any, that so I might destroy when I am dead, as well as when I am living, at which I tremble in the very mentioning. However it is, I have used this method for my own Children, my dearest and nearest Relations, and all others that have committed themselves to my Care: And if I am to be blamed for any thing, it is because I have sometimes yielded to those of a contrary Opinion, lest I should be counted morose; and for the Confirmation of this, I appeal to my intimate Acquaintance. And this is another Unhappiness, that sometimes also, when the Standers-by have condemn'd all I have propos'd through the whole Course of the Disease, yet they have charg'd me with the Death of the Patient, tho' he was destroy'd by that Heat, which the Friends and Nurses promoted, and which I so much inveighed against; upon which

Account, by reason of the insuperable Prejudice of most People, I have thought it would be well for me, if I were never called again to any that have the Small-pox.

Truly, I do not deny, but that the Small-pox will flux sometimes very much, after what manner soever they are handled, and therefore they are never free from danger, though the best help be procured; but this I affirm, (which is enough for my purpose) That it is apparent by daily and often repeated Experience, that he is in much less danger, who totally abstains from Flesh, and keeps himself from Bed in the Day-time, at the first approach of this Disease, and allows himself only small Drink, than he that presently confines himself to his Bed, and takes hot Cordials; for this method, as we mentioned before, most commonly hinders the Flux of the Pustles, and by consequence also the immoderate Effervescence of the secondary Fever, which does not destroy only of its self, but also by thickening the Spittle too hastily, (of which we have treated largely in the History of this Disease) it threatens Death to the Patient, at the latter end of this Disease: And also by this method a bloody Urine, and Purple Spots may be prevented, both which Symptoms invade at the beginning of the Disease, and often before there is any Sign of the Eruption, which is also usual in the Measles, and Scarlet-Fever, and other acute Diseases, that proceed from a great inflammation. To say nothing now of that pleasant Refreshment, which the patient perceives himself encompassed with, from the free Approach of the Air, as often as he is taken out of the hot Bed; which every one of those that I was permitted to treat after this manner, openly declared, being extremely thankful, as if they had been recovered from Death, having as it were received Life and Spirit from the Air.

From whence I have been induced to consider, how much oftner we are misguided, by that which we supposed to be Reason, than by Sense, which is most certainly known to us, and that in the Cure of Diseases, we should have a greater regard to the earnest Desires of the Sick, (if they are not very irregular, and such as would presently extinguish Life) than to the more doubtful and fallacious Rules of the medical Art: For instance,

stance, he that has a burning Fever earnestly desires the free use of small Beer; now the Theorems of Art that are built upon a certain *Hypothesis*, that proposes to it self some other End, with which the indulgence of a cooling Liquor does not agree, crosses the Appetite and orders a Cordial instead of it: The same Patient being kept from small Beer, loaths all sorts of Nourishment, but Art especially, that which Nurses and the Friends that stand by profess, earnestly requires that he must feed. Another upon the same Account, after long Weakness, humbly petitions for some absurd thing, and which perhaps may seem hurtful; and here again impertinent Art opposes, and pronounces Death if he will not be observant, unless perchance the Artist has well digested this wholesome Aphorism of the wise *Hippocrates*: Meat and Drink, tho somewhat worse, if pleasing is to be preferred before better, that is displeasing. In all these wanderings of Nature, as it seems, any one that is but indifferently accustomed to the Practice of Physick, if he seriously consider, will readily grant, that many Patients have been better after they have forsook the Precepts of their Physician, and have followed their own Inclinations; neither will he wonder at this, who considers, that the most wise Creator of all things, has accomplished the whole with such great exactness, that even as all the Miseries of Nature, excellently conspire to compleat the Harmony of the whole Work, so each particular is endowed with a certain divine Artifice, interwoven as it were to its proper Essence, by which the Subject removes those ills from its self; which plainly appears at the natural Period of most acute Diseases, (which generally have God for their Author, as Chronical) as also in those Propensions which accompany such Diseases, and prepare a way to free the Sick from that danger, which Art performs, when it is concern'd with Fools: And upon this Account truly, it was very well for those, whose whole trace had been otherwise in a very sad Condition, at the time when the whole Art of Physick was inclosed within the narrow Bounds of *Greece*; which is no more proportionable to the other parts of the World, than a small Village to our *Britain*: And now also what would become of the Inhabitants of so many and so great Regions?

gions? for all *Asia*, *Africa*, and *America*, (except some late Colonies, that are not very populous) and moreover a great part of *Europe*, are altogether destitute of the medical Art: But as the Comedian elegantly distinguishing those that were famous for Reason and Virtue from the Herd of others, that scandalize their humane Shape with a brutish Life; says, they are Men, if they act like Men; so the medical Art, if it be truly an Art, and not only a Name, is the greatest Benefit that belongs to this Life; and is by so much greater than all others, by how much Life is more excellent than those things we enjoy by it.

But to return to the business: How profitable soever it be for the most part, that the Patient be kept from Bed at the beginning of the Disease, yet sometimes (which is to be noted) he must be altogether confined to it before the Eruption: For instance, a Child that is past the Symptomis, which accompany the breeding of Teeth, is of a sudden taken with a Convulsion; in this case we must consider that perhaps it proceeds from Nature, endeavouring to thrust out to the Habit of the Body, the Small-Pox, Measles, or Scarlet-Fever, tho' yet they are hid in the Skin: That therefore we may sufficiently provide against so dangerous a Symptom, we must presently apply a Blister to the Neck, and put the Child to Bed, and give a Cordial, with a small quantity of some Opiate, by which the Cause of the Disease may be the more powerfully cast out, and also the Tumult which occasions the Paroxysm may be quieted. E. G. I prescribe five Drops of *Liquid Laudanum*, in one Spoonful of Epidemick Water, or the like, for a Child of three Years old: And truly I very much suspect, not to say I am certain, that some thousands of Children, and some older, have therefore perished, because Physicians have not sufficiently considered, that such Convulsions are nothing else but the Forerunners of the fore-said Diseases; for unwary Physicians taking these Fits, which are really Symptomatical, for essential Diseases, and endeavouring to cure them by Glisters often repeated, and other Evacuations, hinder the Eruption of the Pustles, and render the Fits more lasting, which they so much study to vanquish, and which would otherwise certainly vanish of their
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own accord, as soon as the Pustles come out: And the Small-Pox (as we have mentioned in another place) that seize young Children with a Convulsion, are favourable and seldom flux much, so that the Patient may be put in Bed much safer at the beginning of the Disease; but I have observed that the Small-pox flux very much, when they immediately follow Comatose Diseases: In which case, I rather order a Blister, and such an Opiate, as I described, than to let the Patient keep his Bed continually before the Eruption. I have also taken notice, That such Convulsions do sometimes (though very rarely) precede the Fits of intermitting Fevers; but Comatose Diseases often begin and end with these Paroxysms, as well in Children as grown People; of both which there is no notice to be taken with respect to the Cure, but the Fever is only to be opposed, that being the chief and essential Disease; for if I should principally regard these Comatose Symptoms that accompany the Fever, and therefore should strive to conquer this Drowsiness by Bleeding, Purging, and repeated Glysters, I should by this means heighten the Fever, and by consequence so increase the *Coma*, (which I endeavour'd to cure) that the Patient at length would be lulled asleep for ever; whereas if I use my utmost endeavour to cure the Fever, all the Symptoms that proceed from thence, will be easily vanquished, which I desire may be seriously minded; for upon this account frequent, and very fatal Errors are wont to happen: But I spoke largely of this in another place.

In the next place also I must acquaint you, though it be advantageous for the Patient to be kept up a days, yet this Comfort cannot be allowed sometimes, if vehement Sickness, a high Fever, violent Vomiting, Giddiness, and Pains of the Limbs like a Rheumatism, &c. *contraindicat*; all which Symptoms, if they be violent, especially in those that are Sanguine; and in the flower of their Age, betoken that there is a great quantity of varolous Matter within, and that there will be no small danger from the Pustles striving to come out tumultuously, and about to Flux extreemly: Seeing therefore it is absolutely necessary to restrain the exorbitance of the Ferment, and yet on the one hand it rages more violently by

by being promoted, by the continual heat of the Bed; and on the other hand the Patient cannot keep up, because he is so very Sick, unless we give him ease; for these reasons it is altogether necessary to bleed him in the Arm, and to give him a strong Vomit some hours after, of the infusion of *Crocus Metallorum*, which does not only expel the Matter that causes the unusual Sickness, but so refreshes the Patient, that being as it were well, he can keep from Bed: Neither are we to endeavour by this method only, to suppress the force of the Ferment, but that the Patient may be the more secure, it is very fit, that besides the Evacuations above-mentioned, a good Dose of Spirit of *Vitriol* be dropt into the small Beer, as often as he drinks, till there be a full Eruption of the Pustles. Yet notwithstanding these Evacuations, and the use of the cooling drink, the Patient must not be permitted to keep his Bed a days, if it may be; for these universals much less restrain the Assimilation of the variolous Matter, than once cooling the Blood by the fresh Air, passing in and out by the Lungs, which alone forthwith lessens the above-mentioned Symptomatick Sickness, as I have found by experience more than once: But this somewhat unusual method, is not necessarily required, unless in those that are in the flower of their Age, whose Blood has been over-heated by Venery or Wine, and in others (always excepting young Children) that together with the Small-pox, conflict with those violent Symptoms above-mentioned; where the Blood is not so much inflamed, nor the Symptoms so violent, as there is much less danger of over hastily Assimilating the variolous Matter, so by consequence the forementioned Evacuations, and the Spirit of *Vitriol* may be omitted.

I have taken the more time in treating of these things, because I am very well satisfied, that the happy, or lamentable end of the Disease, chiefly if not wholly, depends on the Management of the Patient at the beginning; but now all the Pustles being come out (which, as we have said before, was on the Sixth day, reckoning from the first Invasion, but on the Fourth inclusively from the first Eruption) the Patient is no more to be kept from his Bed the remainder of the Disease, which indeed

deed as it ought not to be allowed before this day, so the Condition of the Patient will scarce bear, that it be deferred any longer, if he has the Flux-pox; and this is the sort (which I desire may be taken notice of) that we have hitherto treated of; for if the Pustles are few, it is no great matter which method is used, if the Physician be but indifferently well skilled; for tho' this kind of its own Nature be free from danger, yet not a few (which is much to be lamented) have died, when they have unfortunately made use of those, who placing all their hope in promoting the heat, have ignorantly conspired with the Disease to destroy the Patient.

From this time the Pustles begin to increase, and to inflame the Superficies of the Body, all over, especially the Head, so that the Patient, unless he be a Child, is restless and can hardly sleep, which I think in the next place is to be seriously considered in this Disease; for the more sedate the Blood is, the better do the Pustles increase and attain their due Magnitude; and on the contrary, according to the degree of the violent Motion, by which the Blood is disturbed, the Pustles fade, their farther progress being intercepted, so that the Eruption of the peccant Matter is not only obstructed, but moreover the Oeconomy, and natural *Crafsis* of every particular *Phlegmon* is disturbed; and therefore, either they do not at all attain Separation at their due time, or instead of Pus, at length an Ichor is produced, and for the yellow Liquor, resembling the colour of an Honey comb, some black Humour, or some other Non-natural Juice is cast out, contrary to the genuine Pustles of the Small-pox: Wherefore I think *Opiates* are as much indicated in the Small-pox, as any other Remedy is in any other Disease; for in this Case they are as it were Specificks, as the Jesuits Powder in intermitting Fevers; tho' I know very well, that *Paregoricks* do not operate by any precise Specifick Virtue, but only by answering that Indication, by which we endeavour to quiet the Blood and Spirits, and to reduce them to order; and truly this inordinate Motion of the Blood and Spirits (being an inseparable Companion of the Flux-pox in grown People) chiefly requires the use of *Paregoricks*: Neither does he as yet rightly understand the Genius of this Disease,

Disease, who thinks those things are only occasioned for want of sleep; for as it may happen sometimes, he that does not sleep may also have his Spirit composed and quiet, (which often happens upon taking of *Laudanum*) so sometimes it comes to pals, that the Spirits being in violent Motion, hinder the laudable Eruption of the Pustles, even when the Patient sleeps much, which is worth Observation.

Now to speak of the sorts of *Anodynes*, tho' I have used Liquid *Laudanum*, for many years with good Success, when this Indication was to be answered, yet I think *Diacodium* is to be preferred before it, tho' both may be used for the same purpose, yet I suppose the *Laudanum* heats a little more than the Syrup; as to the Dose, that is not only to be suited to the Age of the Patient, but to the degree of the Symptoms, and that which perchance would be too much for a Person whose Spirits are well composed, would not be sufficient for another that has his Spirits enraged: For instance, we suppose in general that six Drams is sufficient for most; but for those that have the Small-pox, when this kind of Remedy is indicated, we must scarce give less than an Ounce, if we will do any thing to the purpose, which quantity indeed must be prescribed for one Dose through the whole course of this Disease; I speak now of grown People, for if it be given to Children, the Dose must be lessened according to their Age; and truly *Anodynes* are not so much indicated in Children that have the Small-pox, as in grown People, for they are more prone to sleep the whole time of the Disease; yet if they are in much danger, I should be afraid to abstain from *Opiates*. But as I was about to say, it is very hard to determine the Dose of the *Anodyne*, in all the Cases in which they are indicated, for whether it be in any inordinate Motion of the Spirits, or in violent Vomiting, or Fluxes of the Belly, or great Pains, in which three Diseases, *Anodynes* are chiefly indicated (as we said in another place) they are to be given in such a manner, that if the first Dose do not do the business, another and also another is to be given at due times, till at length the Medicines answer the intention of the Physician, not so much regarding the quantity taken, as the effect it should produce

produce in the Patient; and when this is done, and not before, we must desist from so frequent, and great use of the *Anodyne*; but such a space must be interposed between the Doses, that we may be able to know, whether the last performed the Business designed, before another be prescribed: but when we have once obtained our end, the Dose of the *Anodyne* is to be lessened in the progress of the Disease, as things appear.

I have many Observations in readiness, that may confirm what I have hitherto delivered, but for the present I will mention but one. The 13th. of April 1681. one of my Neighbourhood, by Name, *Cross*, came weeping to me, and earnestly desired that I would visit her Son, which was Ten years old, who being ill for Four days, had as she feared the Small-pox; but I being laid up with the Gour, which at that time afflicted me, desired my Apothecary to visit him, and to acquaint me how he was; when he turned, he told me, that the Boys Mother had given him the Countesses Powder, and other hot Medicines by the Advice of a Petticoat Doctor, and that by her over-care she had as it were buried him in Cloaths, that by their weight she might provoke Sweat (which Women fly to in this Disease, as the sacred Anchor of their hope:) moreover, she drenched him with a great quantity of Posset-drink, with Mary-Gold-flowers, and *Harts-horn* boyld in it, by which the Fever being increased, it occasioned so great a Confusion of the Spirits, that the Child was extraordinary light-headed, so that he could hardly be kept in Bed by all the force of the Bye-standers, and he muttered some odd words, like those that are mad; neither did the Pustles yet appear, or very obscurely, but they lay very full in the Skin, the Eruption being plainly hindred by this violent method, which was designed to promote it; I ordered that he should be presently taken out of the Bed, and should not return to it again, but only a Nights, till the Sixth day was past, and then that he should presently take half an Ounce of *Diacodium*; which doing no good, I ordered the same Dose to be repeated an hour after, but without any Success; for the Blood raged so furiously, that it could not be quelled before he had taken two Ounces and an half; but there was so much space betwixt the
taking

taking of each half Ounce, that I might be certain what was the effect of the last Dose. Afterwards I prescribed half an Ounce to be taken only every Night at Bed-time, to the end of the Disease, which was sufficient to preserve the quiet of the Spirits, that a more frequent use had already obtained, and by this means the Patient recovered.

And here I must inform you, that how great soever the Dose of the *Anodyne* be, which is prescribed at the beginning of the Disease, and tho' it be repeated, yet it can scarce obtain its end, unless the Patient rise, if the heat of the Blood, and the violent motion of the Spirits rage mightily; for the heat of the Bed increases the heat of the Disease, and therefore it will be necessary to give so great a quantity of the *Anodyne*, that perhaps Nature will not be able to bear it, which likewise happens, tho' not with the same danger, when the *Peruvian Bark* is taken in an intermitting Fever, whilst the Patient keeps his Bed; and this I suppose is the Reason, why the Cure of this Fever is sometimes prolong'd, which otherwise might be performed sooner; and sometimes also if the Fever only remit, it will be so heightened, that the Patient will scarce escape Death.

But to omit extraordinary Cases, in which this Remedy may be indicated at any time of the Disease, I would have it first prescribed the Night in which the Patient is altogether confined to his Bed, to wit, the Sixth from the first Invasion, from which time it is to be given every Evening to the Seventeenth day, or at least till the Patient is out of danger. For on the Sixth day, the Flesh being seized as it were with an Inflammation, the Head begins to be disturbed by the Humours, that are also inflamed upon this Account.

But we must take great care that the *Anodyne* be used earlier in this Disease than in others, because as it were a Paroxysm of heat and restlessness, always afflict those that have the Small-pox about Evening; and sometimes it happens, that unless it be given early at the latter end of the Disease, the Patient on a sudden being somewhat dull, presently grows hot, and afterward complains of Sickness, which soon ends in Death, his Friends being wonderfully astonish'd, who a little before entertained great hopes of his Recovery; and perhaps his Death might

might have been prevented by giving an *Anodyne* immediately; therefore on these days, especially on the Eleventh, I order the *Anodyne* to be taken sooner, viz. about five or six in the Evening, that it may be ready to quell the Sickness, if it should chance to happen of a sudden: And truly I am very confident, that some of my Acquaintance have therefore perished, because they were destitute of this Medicine, when their Case required it, who otherwise might now have been in the Land of the Living, and if opportunity be sudden in any other Case, it is much more in this: Wherefore seeing so great danger is like to happen, either if an *Anodyne* be not taken soon enough, or on the contrary so over early, that its *Anodyne* Virtue which quiets the Spirits, fades before it is repeated; therefore seeing things are so uncertain, it is safest to prescribe a *Paregorick* to be taken Morning and Evening at appointed hours, to wit, on the last and most dangerous days of the Disease; neither at this time will an Ounce of the foresaid Syrup be always sufficient, for this quantity will signify no more in an intense Inflammation of the Blood, and in a great Exorbitancy of the Animal Spirits, than half an Ounce in a milder Disease; for I have found by repeated Experience, that an Ounce and an half was but enough for one Dose, in Young Men of a Sanguine Complexion, to suppress the violence of the Symptoms which invade them, and which we are most concerned to prevent; and this very Dose, to such Persons, and at such times, may not only be safely repeated, but also with great advantage, Morning and Evening, till the Patient recovers.

Neither am I afraid to confess, that sometimes at the last days of the Small-pox, when they Flux very much, I have been forced to give an *Anodyne* three times in the space of a Natural day, i. e. once every eighth hour; Namely, when longer Intervals for the use of it could not be allowed, by reason of a violent rage and confusion of the Spirits, which occasion Sickness: But this is to be noted, that if this so frequent use of *Diacodium*, is nauseous to the Patient (which often happens on the foresaid days) than *Liquid Laudanum* must be prescribed, of which Sixteen drops is Equivalent to one Ounce of *Diacodium*, namely, if it be prepared after the same

manner as I have peteribed in my Treatise of acute Diseases, in the Chapter of a Dysentery.

I know very well, that they which are displeased at these things, will object, that the peccant Matter will be fixt, and the Spittle lessened by the *Anodyne*, so often repeated in so large a Dose. To whom I answer, that indeed the Salivation will be a little lessened, yet never so thoroughly cease, as not somewhat to revive again, at the longest Intervals from taking the *Anodyne*, when its Virtue is decaying: Moreover it will be supplied with two advantages; First, for that the Patient being recruited by the *Narcotick*, will better expectorate the Phlegm, and tho' the Spittle, which is hauked up be less, yet it's better concocted, than if there were no *Anodyne* prescribed: In the next place, the defect of Salivation is sufficiently supplied by the swelling of the Face and Hands, which by the repeated use of the *Anodyne* is greater, and more certain in those days, in which these parts use to swell, to wit, the Face, from the Eighth day to the Eleventh (at which time it begins most commonly to sink) but the Hands from the Eleventh, till the Pusles which are upon them ripen: And I boldly affirm, which no one who is well skilled in this Disease can deny, that the absence of either of these Swellings, at the time when they should appear, is a worse sign than the stoppage of the Salivation. Truly, I think it is much safer to venture the danger of restraining the Flux, than to leave off the use of the *Anodyne*, which is so extremely requisite in this Disease, that he ought to be accounted very unskilful and careless, who will defraud his Patient of so great an help.

But those things I have hitherto discoursed of, are not to be understood as if I would advise the daily use of *Diacodium*, tho' but in a convenient quantity, in young Children that have the Flux-pox, unless the Disease threatens some great mischief, and that for two Reasons: First, because Children are not so hot as those whose Lamp of Life is fuller of Light, and burns clearer. Secondly, because their soft and infirm Age, cannot so well bear the force of *Anodynes* continually taken: Besides Children sleeping almost perpetually of their own accord, easier pass over the weariness of the Disease;

yet notwithstanding when they are seized with a Phren-
sie, or when the Pustles are of an ill sort, *Anodynes* are
always indicated; for the disturbed Motion of the Blood
and Animal Spirits, folly confirm the same.

These two things, which we have so fully treated of,
to wit, the method by which the over-hasty Assimilati-
on of the variolous Matter is hindered at the beginning
of the Disease, and the other that prevents the inordinate
Motion of the Spirits, which is occasioned by the Intam-
ination of the external parts, are as it were the two
Hinges, on which the whole Cure of the Disease is mov-
ed, forasmuch as the mischiefs that arise, because these
two dangers are not sufficiently prevented, call in those
dreadful Symptoms, that end the Tragedy of the Small-
pox. Wherefore seeing these are the chief curative In-
dications, which when I shall have sufficiently answered,
after the manner now mentioned, there is nothing more
for me to do as I am a Physician, not a Prescriber of a
Medical *Formula*, which two Arts, or Gifts, or if you
please to call them Provinces, I think mightily differ one
from the other.

To mention one thing more, if there be need of a Bli-
ster, it must be very large and strong, and applied to
the Patient's Neck, which ought to be performed so op-
portunely, that neither being put on too early, it leave off
running before the Eleventh day, which is the most dan-
gerous, neither be put off to that very day, so that
coming too late, it might do injury at that juncture of
time, by the heat and rage it imprints on the Blood,
which then is scarce able to combat with the Secondary
Pester; therefore the Blister will be most seasonably ap-
plied the Night which precedes the great Crisis of the
Disease, presently after the *Anodyne*, which is to be taken
then, the Blister being applied at that time, the
Pain will wholly cease that is occasioned by it, before
that day in which the Patient is to fight the great Bat-
tely and there will be a discharge of the peccant Matter
at that time, of which there is need to conquer those
great Symptoms that attend upon that Day; for it is
at this time first (which I have handled largely in the
History of this Disease) that the Face which hitherto
swelled, now begins to assuage, and the Salivation which

hitherto flowed plentifully decreases, the Humour being thickned and hardly hauked up, which occasioned it: but to omit, that the Blister somewhat supplied the sinking of the Swelling of the Face and the Spitting that was lessened; moreover it in some measure conduced to the suppressing of the Secondary Fever, which at this time prevails, the Blood being as it were overwhelmed and quite poysoned by the Abundance of Pus sucked in from so many little Ulcers, so that in almost all I have been concerned with, that have been afflicted with the Small-pox, I have observed that the Pulse in the Hand-wrist could hardly be observed, tho' they were easily felt the Day before, and the Day following this Day.

Among those things which draw from the Head, either by derivation or revulsion, nothing in my opinion is so effectual as Garlick applied to the Soles of the Feet. That it really draws, is manifest by the Bladders it raises, and the intolerable Pain it sometimes occasions, tho' rarely when it has raised no Blisters, to wit, by attracting the Humours to those parts, whence so violent Pain is now and then stirred up, that I have been forced to order a Pultis of White-bread and Milk; therefore in grown People that have the confluent Small-pox, I use to apply Garlick sliced, and wrapt in a Cloath, to the Soles of the Feet, from the eighth Day, at which time the Face begins first to assuage, till all the Danger of the Disease be pass'd, and to repeat it every day. Neither must I omit to acquaint you, that the Patient must wholly forbear Flesh, and that he must only use the smallest Beer for his Drink; in the mean while, it is fittest for him to live poorly upon Oat-meal-Broth, roasted Apples, and Small-beer; but at the time of maturation, when the purulent Particles, flowing back upon the Mass of Blood, pollute the same with their Filth, it will be proper to give the Patient a few Spoonfuls of Wine, Night and Morning. As to the Coverings of his Bed, there must be no more, nor fewer than he used to have when he was well, and he must be permitted to move from one part of the Bed to the other, as often as he will, that the Symptomatical Sweats may be hindered, which as I suppose has been sufficiently proved to be injurious to the Patient; and by the same means the violent Inflammation of the Pustles

will

will be prevented, which proceeds from too great a Heat that the Flesh contracts, when he lies always in one place, as if he were staked to it: But of this we have discoursed largely in another place.

I will add a very late Case, as a Specimen of this whole Practice: This Winter the Noble Lady *Dacres* sent for me to her Nephew, Mr. *Thomas Cheut*; he was of a very Sanguine Complexion, and in the Flower of his Age: The day before he begun to be in a violent Fever, he cast up a great quantity of Choler by Vomit, and he had a violent Pain in his Back; and hoping to ease himself he went to Bed, and by heaping on Cloaths, and taking hot Liquors, he endeavoured with all his might to force Sweat, for a whole day, but all in vain; for the great inclination to Vomit, and the Looseness, tho' moderate, frustrated the force of the Sudorifics, and in the mean while increased the Fever; I suspected the Small-pox would soon come out, and that they would flux extremely, by reason of the Vigour of his Age, and also because his Blood was much inflamed, by the fruitless Attempt to force Sweat (upon which account, if it had been Summer, a bloody Urine and purple Spots had certainly been occasioned) but chiefly because I have always observed, that in young Men seized with a violent Vomiting and Sickness, and Pain more than usual, the following Small-pox fluxed beyond measure: Therefore I thought it was my Duty to endeavour all I could to hinder the over-hasty Assimilation of the variolous Matter. I kept him up till the time he used to go to bed. The day following (which was the third) the Small-pox not appearing, I ordered eight Ounces of Blood to be taken from his Right-arm; it was very good and florid, for as yet it had only received the spirituous Venom, not that Putrefaction, which is occasioned by a longer continuance of the Disease, and is most commonly seen in the Blood of those that are newly recovered of this Disease. At five of the Afternoon the same day I gave him an Ounce of the infusion of *Crocus Metallorum*; he vomited very well, and being freed of his Sickness, seemed much better, and willingly kept from bed, from whence before he would scarce yield to be taken, being grievously afflicted with Sickness and Giddiness.

On the fourth day I visited him in the Morning, and found the Pustles coming out so full, (which I had so much endeavoured to prevent) that it was to be feared, they would endanger his Life, by reason of the great Flux they threatned; therefore I took great care, that he was not put to Bed in the Day-time, and I advised he should drink small Beer sharpened with Spirit of Vitriol drop'd into it; he continued this Method till the sixth day, on which Day though he was not sick, but much refreshed by the free use of the Air, yet his Body was now and then something loose; towards Evening he was no longer able to keep from Bed, which is common in this case; therefore he continued in it to the end of the Disease by my consent; for all the Pustles were now come out, which notwithstanding all my Care fluxed much; and though they were fewer than those which I have observed in some that died of this Disease, yet were they more than they used to be in most of those that recovered. This was the first Night that I ordered an Ounce of *Diacodium* in Cowslip-water to be repeated every Night after, and I advised that he should have no more Cloaths on than he used when he was well, and that he should be dieted with Oat-meal and Barley-broth, and sometimes with a roasted Apple, and that he should drink small Beer. On the eighth Day, I ordered sliced Garlick to be wrapt in a linnen Cloth, and applied to the Soles of his Feet, and to be renewed daily till he was past danger; afterwards all things succeeded according to the Genius of the encreasing Pustles, till the tenth Day; at which time, visiting him in the Morning, though I found him pretty well, yet I perceived as it were some Fore-runners of the Secondary Fever, with some kind of restlessness; therefore presently fearing the approaching Storm, I gave him the *Opodine* above-mentioned, by which all things were quieted, and at Night I prescribed an Ounce and an half of *Diacodium*. On the following Morning, to wit on the eleventh Day, when the Virtue of the Paregorick was faded, which he took the Night before, he began to be restless again afresh, therefore I presently ordered him again an Ounce and an half of *Diacodium*, and so much in the Evening, and that he should take the same Dose Morning and Evening, till he was quite well; The Patient was very orderly,

orderly, neither were we affrighted with any other Symptoms afterwards, excepting only that he had a sup-
pression of Urine (a Symptom very frequent to young People in this Disease) but he made water kneeling in the Bed: As to the Salivation, tho' the quantity of the Spittle was somewhat interrupted by the frequent Re-
petition of *Anodynes*, in so large a Dose; yet in the longer Intervals from the use of them, he hacked up con-
cocted Phlegm, and his Face and Hands swelled in due time, as well as could be wished. On the eighteenth Day he rose, and I first allowed him Chicken-broth, and so by degrees he returned to his accustomed Diet. On the twenty first he was let Blood in the Right Arm, and eight Ounces were taken away, which was like the Blood of those that have a Pleurisie, and not much unlike *Pus*. Lastly, he took four Purges at a convenient Distance one from another.

It is to be noted, that when in this Treatise the Day from the first Invasion is mentioned, to wit, the Sixth the Eleventh, and the like; I would not have it be so understood, as if the confluent Small-pox came out always on the third day; whereas I know very well, that it sometimes happens, even in those that Flux most, that the Pustles do not appear till some time after the third Day; but the Eruption is most commonly on the third Day, and for the most part, those for instance which are seized with the Flux-pox on *Monday*, shall perceive the Pustles coming out the *Wednesday* following; and the *Second Thursday* from that *Monday*, will be the Eleventh Day, that is so very dangerous, unless the Physician interpose.

And here I must again remind you, that all these Theorems belong only to the confluent Small-Pox, and are of no use in the distinct sort; neither indeed do they need them; and they impose upon themselves as well as others, who value themselves upon curing those who have but few Pustles, and those distinct also: If they desire to try their Skill, let it be in the Flux-pox, especially when this Disease invades those that are in the flower of their Age, or others that have been intempered by the immoderate drinking of Wine; lest being exercised only in slight Matters, they should be so much mistaken as to

think they have saved thole the By standers did not kill.

But before I finish this Discourse, I will relate what my good Friend Dr. Charles Goodall, Fellow, and at present Censor, of the College of Physicians, told me when I was writing these things, and I do it to confirm what I have said here and elsewhere of the purple Spots, and of bloody Urine; for these Symptoms when they come upon acute Diseases, proceed wholly from a violent Inflammation of the Blood, and therefore indicate cooling Remedies. The case is as follows; a young Man of about twenty seven Years of Age, of a thin and hot Constitution, was seized with a violent and continual Fever in June 1681, his Tongue was dry and foul, he was very thirsty, his Pulse was quick, there was a Pain near the Region of the *Scrobiculus Cordis*, but especially in the Back, wherein it raged continually; he made a bloody Urine now and then, and Spots of a brownish Colour were thick in the Neck, Breast, and Wrists; the Physician was called on the sixth Day, and finding the Sick in great danger, by reason of the great Excretion of bloody Urine, he thought the curative Indications were to be directed for the cooling and thickening of the Blood, and also for stopping the Mouths of the Vessels, which were relaxed and opened in the Veins.

Bleeding therefore, and a lenitive Bolus, being premised, he ordered the Patient to keep from Bed, as much as he could; for he did not question, but that the voiding of Blood by Urine was promoted by the continual Heat of the Bed; he also advised, that he should sleep rather upon a leather Couch, and that he should very rarely lie upon his Back, that he should drink Milk-water, and be dieted with Panada, Ryce-milk, roasted Apples, either alone, or squeezed into Fountain-water, and sweetned with Sugar, and he ordered the following Medicines.

Take of Red-roses six Drachms, of the inner Bark of the Oak half an Ounce, of the Seeds of Plantain a little bruised three Drachms, of Fountain-water a Quart, of Spirit of Vitriol a sufficient Quantity to make it pleasantly acid; infuse them in a close Vessel on a gentle Fire for four or five hours; to the strained Lignor

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add, of Cinnamon-water bordeated three Ounces, of White-sugar a sufficient Quantity to make the Tincture pleasant to the Taste, whereof let him drink often Night and Day,

A Glister of Milk and Syrup of Violets was injected at Two in the Afternoon, and at Bed-time the following Draught was given.

Take of the Waters of Cowslip-flowers, Plantain, and Cinnamon bordeated, each half an Ounce, of distilled Vinegar two Drachms, of Diacodium six Drachms; mingle them.

On the seventh Day the Symptoms scarce remitting, the Glister before described was ordered to be injected daily, and an Emulsion and Draught were prescribed in the following Manner.

Take of the Seeds of Succory, Endive, Lettice, Purslain, each two Drachms, of the Seeds of Quinces and white Poppies, each one Drachm and an half, of sweet Almonds blanch'd Number four, beat them all together in a Marble-morter, pouring upon them gently a Pint and an half of Barley-water; to the strained Liquor add a sufficient quantity of Crystalline-sugar; make an Emulsion, whereof let him take twelve Spoonfuls every fourth Hour.

Take of the Waters of Cowslip-flowers, Water-lilies, Oak-buds and Plantain, each half an Ounce, of distilled Vinegar, and Cinnamon-water bordeated, each three Drachms, of the Confection of Hyacinth half a Drachm, of Diacodium one Ounce; mingle them, make a Draught to be taken at Bed-time.

On the eighth Day, the Fever still remaining, and Blood mingled with the Urine flowing plentifully, and the Spots being many, in the Parts above-mentioned; supposing that all these Symptoms proceeded from the Heat, Thinness and Acrimony of the Blood, he bled again a second Time, and allowed Small-beer more freely, made pleasantly

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stantly acid with Spirit of Vitriol; but because the Sick manifested it, he allowed him Posset-drink made of Juice of Limons and Milk; and also the Pulp of Limons cut into Slices, and wrapt round with Sugar; he also added the following.

Take of the Conserve of Wood-sorrel and Hips, each half an Ounce, of the Confection of Hyacinth three Drachms, of Diascordium one Drachm and an half, of Red Coral prepared, Dragon's-blood and Bole-armenick, each one Scruple, of Syrup of Comfrey, and Mouse-ear, each a sufficient quantity: make an Opiate whereof let him take the quantity of a Hazle-nut every sixth Hour, drinking upon it a small Draught of Posset drink made with Milk and the Juice of Limons, and sweetened with Sugar, or of the vulnerary Decoction made a little acid with Spirit of Vitriol.

Let the Draught prescribed the Night before be repeated with ten Drachms of Diascordium.

On the Ninth day the Spots vanished by degrees, and the Urine was not so Bloody, and the Blood that was in it was more easily separated, and subsided sooner to the Bottom of the Chamber-pot; therefore he advised the Patient to persevere in the use of these things; and a few Days after he added the following things to the same Purpose.

Take of the Conserve of Red-roses pulped and vitriolated four Ounces, of Lucasellus's Balsam two Ounces, of Bole-armenick, Dragon's-blood, and the Species of the Electuary of Coral each one Drachm, with a sufficient quantity of Syrup of Coral, make an Electuary; let him take the quantity of a Nutmeg twice a Day, drinking upon it a Draught of the following Emulsion.

Take of the Seeds of Lettice and Purslain, each three Drachms, of Quinces one Drachm and an half, of white Poppies half an Ounce, of sweet Almonds blanched Number five; beat them in a Marble-mortar, and pour upon them gently a Quart of Plantain-water, and two Ounces

*Owners of Cinnamon-water boyled; to the strained
Liquor add a sufficient quantity of Sugar.*

With these Remedies by the Blessing of God the Sick was freed within three Weeks from the Fever, and those dreadful Symptoms we have mentioned, and the Spots going off, and the Urine coming to its Natural Colour and Consistence, he recovered by degrees his Health and Strength.

But tho' the foresaid Symptoms accompanied the continual Fever, yet not the Disease we have treated of above. But as often as they accompany either Disease, they always arise from a violent Inflammation, and the too great thinness of the Blood; Upon which Account the Blood is as it were forced violently through the Mouths of the Vessels. And without doubt, the same method is to be used, when there is so great a Parity in the Cause, as much as the Nature of the Disease will allow of; wherefore I entreated the worthy Man, that he would give me leave to add this Cure here, and if my greatest Enemy (but judging other Men's Dispositions by my own, I could hope I have no Enemy) had performed the same, I must, being overcome by Truth, confess it had been the greatest Cure I ever knew; for I long ago found how fatal it was for such that have a Fever to render Blood with their Urine. But when it is my good Friends, how earnestly ought I to contend for Truth, and the Reputation of the beloved Man; for this is he, who when very few dared to assert, that I have done any good either in discarding, or calumniating the least thing in Physick, that sustained the Torrent of my Calumniators, and was as earnest to defend me, as a Son would be to defend his Father; But tho' I am obliged by so great kindness, yet I would never have published these Praises, unless he had deserved them; for it is alike faulty to praise or dispraise contrary to desert, for on either side we forsake Truth; therefore no Man ought to blame me, if I affirm he is second to none for Honesty which I have hitherto known; For in those many Years I have been familiarly acquainted with him, he never allowed himself to speak much less to do any thing to the injury of another, and how excellent he is

in the Art he professes will shortly appear, if God grants him life; for being very learned, he has searched into the Ancient and Modern Treatises of Physick; and has been wisely industrious in discovering the minute Subtleties of Practice, without which no Man can practise Physick laudably; and therefore, the Sick will count him as good and successful as the best. Now to conclude; These are my Sentiments of this Disease, which a rash Fancy did not suggest, but practical *Phænomena*; nor can I tell how it should come to pass, that he should be deceived, that bounds and determines all his Thoughts to the meer naked Practice of the Art, or Faculty, which he designs to understand fully, and to practise with Reputation: Or on the contrary, how it is possible, that he should do any thing, but trifle away his whole Life in deceiving himself as well as others, who is vainly employed in contriving those things, that do not at all belong to Practice; and as he would be no very honest nor successful Pilot, that should not bend his Mind so much to know and avoid the Shallows and Rocks, as to contemplate the cause of the ebbing and flowing of the Sea, which truly becomes a Philosopher, but is not his business, who is only to secure the Ship; so neither will the Physician, who has no other Province than that of curing Diseases, be a true Proficient in the Art of Physick, though he has good natural parts, who does not take so much Pains in searching out that hidden and crooked method, whereby Nature produces and nourishes Diseases, (on which also their History depends) and in procuring agreeable Remedies for them, as in nice Speculations, which do not at all conduce to the rescuing of Men from the Jaws of Death, which Physick promises; and this trifling Humour does not only deprive Mankind of those great Advantages, which would accrew to it by the Ingenuity of very many; but it makes also that which is called the Art of Physick, rather a babbling Faculty; at length it comes to this, that the Patient must live or die, as the Philosopher guesses right or wrong; and this must needs be very uncertain; for the first Contrivers of Speculations had as great Contentions about their Brain-sick Fictions, as their Slaves and Tools, and yet none of them perhaps in the right: For tho' upon seri-

ous Consideration, we may be able to find what Nature does, *De Facto*, and what Organs she uses in her Operations, yet the manner how she does it will be always hid from Mortals, or I am deceived. Nor is this strange; for it is much more, yea infinitely more probable, that we poor Manakins, banished from the illustrious Region of Light and Life, can by no means comprehend the Method, which the most wise Artificer used in making the Machin, than that an ignorant and bungling Smith should not understand how a Clock is put together, the Structure and Motion whereof shew the exquisite Neatness of the Art; and as it plainly appears, that the Brain is the Fountain of Sense and Motion, and the Shop of Memory and Thoughts, yet it is not possible, that the Mind should be so enlightened by the most careful Inspection, and Contemplation of it, as to know how it comes to pass, that so thick a Substance, and as it were a Pulp, and as it seems of no great Contrivance, should suffice for so great an use, and such excellent Faculties; nor is any one able to demonstrate, for what reason, according to its Nature and Structure, of parts it necessarily exerts this or that Faculty.

And so much for the confluent Small-Pox, to which, if those things are added, which I have deliver'd of this Disease in the History of acute Diseases, you have the sum of all I hitherto know, and all those things, which I have searched and weigh'd as carefully as I could.

I begin now, because you require it, worthy Sir, to deliver those things which I have hitherto found by Observation concerning Hysterick Diseases; the Diagnostick whereof I readily confess is very obscure, and more difficult than other Diseases, that afflict Mankind, and they are more difficultly cured; but I will endeavour to do as well as I can, and as briefly as is necessary for a Letter, which indeed my Sickness requires, especially at this Season of the Year, wherein there is danger of occasioning presently a fit of the Gout, if I should study too hard; therefore I will deliver in a few words what I have to say, and will proceed in the method I am wont to use, *viz.* I will set down a short History of the Disease, according to the true *Phænomena* of Nature; I will also add the method of Cure, which I have found most successful, which was suggested

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to me heretofore, rather by my own Experience, than is
 no ill Guide, than by the reading of Books.

This Disease, if I calculate right, most frequently oc-
 curs of all Chronical Diseases, and as Fevers with those
 that appertain to them make two Thirds, if they are
 compared with Chronical Diseases taken all together, so
 Hysterick Diseases, at least those that go under that Name,
 are half the remaining Third; that is, they are half the
 Chronical Diseases; for very few Women, which Sex is the
 Half of grown People, are quite free from every Assault
 of this Disease, excepting those who being accustomed
 to labour, live hardly; yea many men that live sedentary
 Lives, and are wont to study hard, are afflicted with
 the same Disease; and the Hysterick Symptoms were
 always heretofore supposed to come from a vicious
 Womb, yet if we compare Hypochondriack Symptoms,
 which were thought to proceed from Obstructions of the
 Spleen, or Bowels, or from some other, I know not what
 Obstruction, an Egg is scarce more like an Egg than these
 Symptoms are one another in all Respects. But it must
 be confessed, that Women are much more inclined to this
 Disease than Men, not because the Womb is more Pasty
 than any other Region of the Body, but for Reasons to
 be shewn by and by.

Nor is this Disease only frequent, but so strangely vari-
 ous, that it resembles almost all the Diseases poor Mortals
 are inclined to; for in whatever part it seats it self, it pre-
 sently produces such Symptoms as belong to it; and unless
 the Physician is very skilful, he will be mistaken, and think
 those Symptoms come from some Essential Disorder of
 this or that part, and not from any Hysterick Disease.

For instance, sometimes it possesses the Head, and cau-
 ses an Apoplexy, which also calls in an Hemiplegy, and
 is exactly like the Apoplexy, whereby corpulent and
 old People are destroyed, and which happens because
 the Animal Spirits are stop'd, the Cortex of the Brain be-
 ing stuff'd, by a great deal of Phlegm, from which cause
 the Apoplexy of Hysterick Women does no way seem to
 arise; for it seizes such very often, presently after Men-
 struall, a great quantity of blood being at the same time
 evacuated, or it proceeds from hard Labour, or some
 violent Commotion of the Mind.

Some-

Sometimes it occasions violent Convulsions, much like the Falling-sickness, the Belly and Bowels swelling towards the Throat, the Sick struggling so violently, that tho' at other times her strength is but ordinary, she can now scarce be held by all the strength of those that are about her, and she mutters some odd and inarticulate Sounds, and strikes her Breast. Women that are wont to have this Disease commonly called Mother fits, are generally very Sanguine, and have an habit of Body almost like that of a *Virago*.

Sometimes it seizes the outward part of the Head between the *Pericranium* and Skull, causing a violent pain continually fixt in one part which may be cover'd with the top of your Thumb, and violent Vomiting accompanies the Pain. I call this kind *Clonus Hystricus*, chiefly afflicting those that have a *Chlorosis*.

Sometimes falling on the Vital parts, it causes so great a beating of the heart, that the Women who are troubled with it verily believe, that those that are near may hear thumping on the Ribs; this kind chiefly seizes those that are of a thin habit of Body, and of a weak Constitution, and who look Consumptive, and also young Virgins that have the Green-sickness.

Sometimetmes it seizes the Lungs, and the Patient coughs almost without Intermission, but Expecterates nothing; and tho' this sort of Cough does not shake the Breast so violently, as that which is Convulsive; yet the Expectations are much more frequent: But this kind of Hysterick Cough is very rare, and chiefly invades Women that abound with Phlegm.

Sometimes rushing violently on the Region under the *Scrobiculus Cordis*, it produces violent Pain, very like the *Mis* Passion, and the Woman Vomits greatly, ejecting a certain green Matter, somewhat like that they call *Petraceous Bile*, and sometimes of a colour unusual. And frequently after the Sick has been almost destroyed by the foresaid Pain (which would weary a Stoical Apathy) and reachings to Vomit for many days, at length the Bile is carried off by a violent Jaundice, which Tinctures the Superficies of the Body like Saffron. Moreover the Sick is oppress'd by a dreadful Anguish of mind, and wholly despaire of Recovery, which dejection of Soul,

Soul, and as it were a certain Desperation, as certainly accompanies (as I have noted) this kind of Hysterick Diseases as the Pain and Vomiting above-mentioned. This kind chiefly invades those, that are of a crude and lax Habit of Body, and those that have suffered much by bringing forth great Children. When this Disease seizes one of the Kidneys, it plainly represents by the Pain it causes there, a Fit of the Stone, and not only by that sort of Pain, and by the place it rages in, but also by violent Vomitings which accompany it, and also for that the Pain sometimes extends it self through the passage of the Ureter: So that it is very hard to know, whether these Symptoms proceed from the Stone, or from some Hysterick Diseases, unless perchance some unlucky Accident disturbing the Woman's Mind a little before she was taken ill, or the Vomiting up of green Matter, shews that the Symptoms rather proceed from an Hysterick Disease than from the Stone. Neither is the Bladder free from this false Symptom, for it not only produces Pain there, but it also stops the Urine, just as if there were a Stone, whereas there is none. But this last kind seizing the Bladder, happens very seldom; but that which resembles the Stone in the Kidneys is not so rare; both are accustomed to invade those Women who are much weakened by Hysterick Fits, coming frequently, and whose Health of Body is much impaired.

Sometimes falling upon the Stomach it occasions continual Vomiting, and sometimes a *Diarrhea*, when it is fixed upon the Guts; but no pain accompanies either of these Symptoms, tho' frequently in both the Green Humour appears. Both these kinds are familiar with those that are much weakened by the frequent coming of Hysterick Fits.

And as this Disease afflicts all the inward parts almost, so sometimes the outward parts are also seized by it, and the Musculous flesh, occasioning Pain, and sometimes a Tumour in the Jaws, Shoulders, Hands, Thighs, Legs, in which kind the Tumour, which swells the Legs, is more conspicuous than the rest; but whereas in Hydropical Tumours these two things may be always observed, namely, that the Swelling is most in the Evening, and being pressed by the Finger, a pit remains; In this Tumour the Swelling is most in the Morning, neither does it yield to
the

the Finger, or leave any mark behind it; and for the most part it only swells one of the Legs. As to other things, if you observe the Largeness of it, or its superficies, it is so very like Hydropical Swellings, that the Patient can scarce be perswaded to believe, that it is any other Disease. Neither are the Teeth, which you will scarce believe, free from the Assault of this Disease; tho' they are not hollow, and tho' there is no apparent Desquidion, that may occasion the Pain, yet it is no whit gentler, nor shorter, nor easier to be cured. But those Pains and Tumours that afflict the outward parts, chiefly fall upon those Women, that are in a manner quite destroyed by a long Series of Hysterick Fits, and by the force of them.

But among all the Torments of this Disease, there is none so common as a pain in the Back, which most certainly all feel, how little soever they are afflicted with this Disease. Moreover this is common to the above-mentioned Pains, that the Place on which they were, cannot bear touching after they are gone, but is tender, and akes just as if it were beaten soundly; but this Tenderness goes off by degrees.

And this is worthy of Observation, that often a notable cold of the external parts, makes way for these Symptoms, which for the most part goes not off till the Fit ends, which Cold I have observed is almost like that by which a Carkass grows stiff, yet the Pulse is good.

And moreover; almost all Hysterick Women, whom I have taken care of hitherto, complain of a Dejection and sinking of the Spirits; and when they would shew the place where this Contraction of sinking of the Spirits is, they point to the Region of the Lungs.

Lastly, it is known to every one, that Hysterick Women sometimes laugh excessively, and sometimes Cry as much, without any real cause for either.

But among all the Symptoms that accompany this Disease, this is the most proper, and almost inseparable, viz. An Urine as clear as Rock-water; and this Hysterick Women evacuate plentifully, which I find by diligent inquiry, is in almost all, the Pathognomonick sign of this Disease, which we call Hysterick in Women, and Hypochondriack in Men; and I have sometimes observed, in Men, that presently after making water of a

Citron colour (yea almost the next moment) being suddenly seized with some violent Perturbation of the Mind, they presently void water as clear as Crystal, and in great quantity, with a continued violent Stream, and continue ill till the Urine comes to its wonted Colour, and then the Fit goes off.

And it happens to all Hysterical and Hypochondriacal People, when the Disease has been long upon them, that sometimes they belch up ill Fumes as often as they eat, altho' they eat with Moderation, and according as they have an Appetite; and sometimes the Wind that comes from the Stomach is sour just like Vinegar, when it comes into the Mouth, the Concoction being much decayed, and the Juices quite changed from their natural State.

Nor are they unhappy on this Account only, viz. that their Bodies are so disorder'd, and as it were tottering like ruin'd Houses; for their Minds are worse affected than their Bodies, for an incurable Desperation is mixt with the very Nature of the Disease; they are very angry when any one speaks never so little of the hopes he has of their Recovery, easily believing that they undergo all the Miseries that can befall a Man, foreboding the most dreadful things to themselves, entertaining in their restless and anxious Breasts upon small occasions, and perchance for none at all, Fear, Anger, Jealousie, Suspensions, and worse Passions of the mind, if any can be worse, abhorring all Joy, Hope, and Mirth, and if any of these chance to happen, 'tis very rare, and soon flies away, and yet does not less disturb the Mind, than the sorrowful Passions, and they never keep a Mean, constant only to Inconstancy. Sometimes they love above measure, and presently hate the same without any reason; sometimes they intend to do this or that, then presently alter their Intentions, and begin the quite contrary, and yet they do not do that neither; so wavering are they that their Minds cannot be at all at rest; and what the Roman Orator said of the Superstitious, agrees exactly with these Melancholy People, Sleep, says he, seems to be a refuge for the Laborious, and careful; but from thence Cares and Fears arise, whilst only Funerals and Apparitions of their Friends deceased are represented in Dreams, and they are so afflicted in Body and Mind, that one would imagine that

that their Lives were a Purgatory, wherein they were to purifie themselves, and to expiate Crimes committed in some other State; nor is it only so with mad People, but also with those, who, if you except these Impetuosities of Mind, are very prudent and judicious, and who much excel, for deep Thought and wisdom of Speech, others whose Minds were never excited by these Provocations to thinking; so that *Aristotle* was in the right, when he said that Melancholy People are most ingenious.

But this dreadful Condition of Mind, which I have mentioned above, seizes those only that have much, and a long while been afflicted with this Disease, and have been at length quite conquered by it, especially if Adversity, Care, or Trouble of Mind, or hard Study, or the like, joyned with an ill habit of the Body, have added Oyl to the Flame.

A Day would scarce suffice to reckon up all the Symptoms belonging to Hysterick Diseases, so various are they, and so contrary to one another, that *Proteus* had no more Shapes, nor the Chamelion so great Variety of Colours: And I think *Democritus* was pretty right (tho' he mistook the Cause of the Disease) when he wrote in an Epistle to *Hippocrates*, that the Womb was the Cause of six hundred Miseries, and of innumerable Calamities. Nor are they only very various, but also irregular, that they cannot be contained under any uniform Type, which is usual in other Diseases, for they are as it were a disorderly heap of *Phænomena*, so that it's very hard to write the History of this Disease.

The Procatartick or external Causes of this Disease, are violent Motions of the Body, or which is much oftener, violent perturbations of the Mind from some sudden Assault, either of Anger, or Grief, or such like Passions; therefore as often as Women advise with me about this or that Disorder of the Body, the reason whereof cannot be deduced from the common Axioms; for finding out Diseases, I always diligently enquire of them, whether they are not chiefly afflicted with that indisposition, which they complain of, when they have been disturbed in their Minds, and afflicted with Grief; which if they confess, I am abundantly satisfied that the Disease must come under this Tribe we now

discourse of, especially if Urine clear as Crystal evacuated copiously at some certain times makes the Diagnostics more manifest. But to these Disorders of the Mind, which are usually the Cause of this Disease, Emptiness of the Stomach, by reason of long fasting, is to be added, and immoderate Bleeding, a Vomit or Purge that hath wrought too much. Now having drawn the Picture of this Disease according to its vulgar *Phænomena*, in the next place the internal efficient Causes of it are to be considered, as well as we can gather them from all the Circumstances joyned together, which we have described. And in my opinion those Diseases, which we call Hysterical in Women, and Hypochondriacal in Men proceed from a Confusion of the Spirits, upon which Account, too many of them in a Croud, contrary to proportion, are hurried violently upon this or that part, causing Convulsions and Pain, when they rush upon parts endued with exquisite Sense, perverting the Functions of the Organs, both of that they thrust themselves into, and also of that from whence they departed; both being much injured by this unequal Distribution, which is altogether contrary to the Oeconomy of Nature.

The origin and antecedent Cause of this Ataxy, is a weak Constitution of the said Spirits, whether it be natural or adventitious; for which reason they are easily dissipated upon any occasion, and their System soon broke. For as the outward Man is framed with parts obvious to Sense, so without doubt the inward Man consists of a due series, and as it were a Fabrick of the Spirits to be viewed only by the Eye of Reason: And as this is nearly joyned, and as it were united with the Constitution of the Body, so much the more easily or more difficultly the Frame of it is disordered, by how much the constitutive Principles that are allotted us by Nature, are more or less firm: Wherefore this Disease seizes many more Women than Men, because kind Nature has bestowed on them a more delicate and fine Habit of Body, having designed them only for an easy Life, and to perform the tender Offices of Love: But she gave to Men robust Bodies, that they might be able to delve and manure the Earth, to kill wild Beasts for Food, and the like.

But

But that the said Confusion of Spirits is the Cause of this Disease, the *Phænomena* now described will abundantly prove; I will only mention the chief of them. And I begin with Mother-fits. Here the Spirits are crouded in the lower Belly, and violently rushing together towards the Jaws, produce Convulsions in every Region through which they pass, blowing up the Belly like a great Ball; which yet is nothing but the rowling together, or conglobation of the parts affected with the Convulsion, which cannot be suppressed without great Violence. The external parts in the mean while, and the Flesh being in a manner destitute of Spirits, because they are carried another way, are often so very cold, not in this kind only, but in all other kinds of Hysterick Diseases (as was noted above) that dead Bodies are not colder. But the Pulse is as good as that of People in health; nor is the Woman's Life in danger by this cold, unless it is occasioned by some great Evacuation going before.

The same may be said of that Hysterick Disease, which to outward appearance is like the Bilious Cholick or the Iliack Passion, in which the Woman is seized with a violent Pain about the *Scrobiculus Cordis*, and also violent Vomiting, by which a Matter is cast up, like Herbs in colour; which Symptom I suppose, proceeds only from a violent Impulse of the Spirits crouded together in the said parts, which causes the Convulsion and Pain, and the total Subversion of all the Faculties. Nor is it to be concluded presently that this Disease resides in the Humours, because those things that are evacuated upwards and downwards are of a Green Colour sometimes, or that the violent Pain is produced by the Acrimony of some Humour tearing the part it adheres to, which for that Cause, we account the occasion of the Disease, and therefore suppose it ought to be rooted out by Vomits and Purges; for it is manifest that the Sickness which seizes People that go to Sea (arising from the Agitation of the Animal Spirits in the boistrous Sea) occasions the vomiting up of Matter as green as an Herb, from the Stomachs of those in perfect Health, when they go first to Sea, and are a good way from Land, in whom there was none before of that colour which they call porraceous. And do not Infants in convulsive Fits, in which the Animal Spirits are chiefly concerned, evacuate

upward

upward or downward Matter of the same Colour, to which must be added that which almost daily Experience teaches, to wit, that tho' such Women and Children should be quite exhausted by repeated Purges, yet the said Colour would still appear in that which they evacuate by Vomit or Stool; yea the green matter increases by the frequent using of Catharticks and Emeticks; because by both, the Confusion of the Spirits is augmented, which I know not how either destroys, or perverts the Ferment of those parts, or throws into the Stomach or Guts, by the force of the Convulsions, some Juice of a strange Nature, which is disposed to give the Humours such a Tincture. And tho' Chymists are not so happy as to prepare better Medicines in their fruitful Glass than are made in a Mortar or a Pipkin, yet know they how to please the vain Humour of the Curious, by shewing two Liquors equally limpid and clear, which being mixed together, presently change into some deep Colour, as if there were conjuring in the case. And indeed the Speculation of Colours is so uncertain, and vain, that we can learn nothing of certainty from them concerning the Nature of the Bodies they appear in; nor does it more necessarily follow that those things which are of a green Colour should be acrid, than that all acrid things should be green. These things therefore being thoroughly considered, it will plainly appear, that the violent Pains which almost destroys those that are afflicted with the Hysterick Cholick, and the Evacuation of the green Matter, are wholly occasioned by the Spirits rushing in violently upon the parts about the *Strabulus Cordis*, and contracting the same by Convulsions.

That Symptom which I termed above *Clonus Hystericus*, is to be attributed to this Enormity of the Spirits in which the Spirits in all the compass of the Body are as it were contracted in a certain Point of the *Pericranium*, occasioning a Pain, boring as it were through, just as if a Nail were driven into the Head, together with violent vomiting and casting up of green Matter; which Contraction indeed is somewhat like that Contraction of the Rays of the Sun, which is made by a Burning Glass; and as the force of these united beams, so they by the same reason produce Pain, by tearing the Membranes with their forces united.

And then from that inordinate Agitation of the Spirits disturbing the Blood, arises that Symptom, which we have mentioned above is often in Hysterical and Hypochondriacal People, *viz.* clear, limpid and copious Urine: For when the Oeconomy of the Blood is disturbed, the Sick cannot long enough contain the Serum that is imported, but lets it go before it is impregnated with Saline Particles, by which the Citron colour is to be communicated to it; whereof we have a daily Experiment in those that drink much, especially of thin and attenuating Liquors, for then their Urine is very clear, in which case the Blood being over-powered by that quantity of Serum, and being wholly unable to retain it, puts it off quite clear, not as yet coloured by the Juices of the Body by reason of its too short stay.

Three Years ago, a Noble-man sent for me; he seemed to labour under an Hypochondriack Cholick, that was almost come to an Illack Passion, with Pain and violent Vomiting, with which he was greatly, and a long time afflicted, and almost worn out. I observed through the whole Course of the Disease, that when he was worst, his Urine was always clear; but when he was a little better, it was somewhat of a Citron-colour. Visiting him one day, I looked upon his Urine made at three times, kept apart in three Chamber-pots, of a Citron-colour; he was then merry and cheerful, thinking to eat some Meat of easy Digestion, and said he had a craving Appetite; but one coming in at that very moment, vex'd him so much, that suddenly being taken ill, he called for a Chamber-pot, which he almost filled with Urine as clear as Chrystal.

And perhaps that spitting so common to Hysterical Women proceeds from the Spirits disturbing the Blood; they spit thin for many Weeks just as if they were salivated by Uuction: for during this disturbed Motion of the Blood, in which it is not able to perform Evacuation according to Nature's method, the Serum by chance taking this contrary Course is not evacuated by the Reins according to Nature's Rules, but is put off by the Extremities of the Arteries upon the Glands, and so comes forth by the salivary Passages in the form of Spittle. The same may be said of those violent Nocturnal Sweats,

which afflict Hyfterical Women, which proceed from no other Cause than the ill Disposition of the *Serum* of the Blood, by which it is inclined to be put off upon the Habit of the Body, by reason of the confusion of the Blood, just now mentioned.

As to the Cold by which the external parts are so often chilled in Hyfterical Diseases, it is very apparent, that that happens because the Spirits forsaking their Stations, too officiously intrude themselves into this or that part: Nor is it to be doubted that weeping and laughing Fits, which often seize Hyfterical Women, without any occasion, are caused by the Animal Spirits forcing themselves violently upon the Organs, that perform these Animal Functions.

And by the bye, Men are also (tho' rarely) subject to Fits of Weeping. I was sent for some time ago to an ingenious Gentleman, who but a few Days before had recovered of a Fever; he made use of another Physician, who blooded him, and purged him three times, and forbade him the use of Flesh: When I came and saw him with his Cloaths on, and heard him discourse judiciously, I asked to what purpose I was sent for: One of his Friends answered, if I would have a little patience, I should see; sitting down therefore, and discoursing with him, I presently took notice, that his lower Lip was thrust out, and moved frequently, (as froward Children are wont to do to prepare for Crying) and then wept so violently, that I scarce ever saw the like, with such deep Sighs as were almost convulsive; which sudden Torrent in a little time asswaged. I supposed that this Disorder proceeded from a Confusion of the Spirits, which was partly so occasioned by the length of the Disease, and partly by Evacuations which the Method of Cure necessarily required; and partly also from Emptiness, and abstinence from Flesh; which the Physician ordered for some Days after he was well, to secure him from a Relapse. But I affirmed he was clear from all danger of a Fever, and that the abovementioned Symptom was wholly produced by Emptiness, and therefore I ordered that a roasted Chick should be provided for his Dinner, and that he should drink Wine moderately; which being done, and he returning again to the eating of Flesh

mode

moderately, was never afterwards troubled with this convulsive Weeping.

And now at length to come to a Conclusion, (for I omit other *Phænomena*, which belong to this Disease) that disturbance and varying Intemperies both of Body and Mind, which prevails over Hysterical and Hypochondriacal People, is produced by the Inordination of the Spirits, for in both that firmness of the Spirits being wanting, which is always to be found in the Robust, and in those who are continually strengthened by the Assistance of vigorous Spirits, they cannot bear the Impressions of cross Accidents, but are soon moved by Anger, or Pain, and are as apt to be angry, as those to whom either Nature has given a soft and weak Government of Mind, or it has been rendered so by a long Series or Continuance of Diseases. For the Strength and Constancy of Mind, as long as it is confined in the Body, much depends on the firmness of the Spirits, that are subservient to it; which indeed are made of the finest Matter, and are placed in the Confines of immaterial Beings; and as the Frame of the Mind, if it be lawful to call it so, is much more curious and delicate than the Structure of the Body, for it consists in the Harmony of the most excellent and almost Divine Faculties; so if its Constitution is any way vitiated, by so much the greater is the Ruin, by how much it was more excellent and more exquisitely composed when it was whole. And this truly is the Condition of these miserable and dejected People we have described, for which Disease, some obstinate Decree of the most insolent Stoick would give no greater ease, than he that would prevent the Tooth-ach, by firmly resolving that he would not by any means permit his Teeth to ache.

And now I suppose it is manifest, that this whole Disease is occasioned by the Animal Spirits being not rightly disposed, and not by Seed and menstruous Blood corrupted (as some Authors affirm) and sending up malignant Vapours to the parts affected; nor from I know not what depravation of the Juices, or congestion of acrid Humours as others think, but from those Causes we have assigned. For that the Fomes of the Disease does not lurk in matter, will evidently appear by this one instance, viz. a Woman that used to enjoy perfect Health, being

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Being delicate, and of a thin Habit of Body, if the chance to be weakened and exhausted by some Error, or by a strong Vomit or Purge, will certainly be afflicted with some one of those Symptoms that accompany this Disease; which would rather be removed than occasioned by such Vomiting or Purgings, if the Fomes of the Disease was contained in an Humour. The same may be said of a great Loss of Blood, whether it be taken away by opening a Vein, or flows immoderately in Labour, or of Emptiness or too long abstinence from Food; all which would rather prevent Hysterick Diseases, than produce them, if the Fomes of them was contained in some matter: Whereas on the contrary nothing does so constantly occasion this Disease, as these Evacuations.

But though it is evident enough that the original Fomes of the Disease, is not lodged in the Humours, yet it must be confessed that the Confusion of the Spirits, the Cause of this Disease, occasions putrid Humours in the Body, by reason the Function as well of those parts which are distressed by the violent Impulse of the Spirits, as of those which are deprived of them, is wholly prevented. And most of these being as it were separatory Organs designed for the Reception of the Impurities of the Blood, if their Functions are any way hurt, it cannot be but a great many Feculentia will be heaped up, which had been eliminated, and so the mass of Blood purified, if the Organs had performed their Duties; which they had certainly done, if a due Oeconomy of the Spirits had invigorated them all. To this Cause I attribute great Cachexies, loss of Appetite, a *Cholera*, or the white Fever in young Women, (which I doubt not is a Species of Hysterick Diseases) and the Spring of all the Miseries that afflict poor Women, that have languished a long time under this Disease; all which are produced by putrifying Juices heapt up in the Blood, and flowing from thence upon the various Organs. Of this kind is a Drop-sie of the Womb in Women which have been long afflicted with this Disease, produced by depraved juices cast from the Blood upon the Organs, by which their Faculties being perverted, they become first barren, the Oeconomy of the parts being wholly destroyed, and then Saltes and Scrums are generated, which do not only
stiff

stuff the Eggs of the Testes, but also insinuating themselves into the *Interstices* of the Coats, cause them to grow very big, which is perceived by the Dissection of those that die of this Disease: And the Hysterical Disposition, is the prime Cause of these and other Humours, though they are not of the same kind with it. As in a Quartan-Agüe, with which any one in perfect Health may be seized, if he stays two or three days in fenny or moistish Places; First, some spirituous Venom of the Disease is imprinted upon the Blood, which continuing a long while, and at length the Oeconomy of Nature being hurt, it infects all the Juices of the Body, and quite alters their Dispositions; so that the Sick (especially if he begins to be antient) is rendered obnoxious to Cachexies and other Distempers, which come upon long Agües; yet these Agües are not to be cured by those Remedies that are fit to purge off such Humours, but by such things as cure Agües by a specifick Quality.

From all that has been treated of, it is very evident to me, that that is the chief Indication in this Disease, which directs the strengthening of the Blood, that is, the Fountain and Origin of the Spirits; which being done, the invigorated Spirits can preserve that Order which is agreeable to the Oeconomy of the whole Body, and the particular parts. And therefore, when the Ataxy of the Spirits (which we have allowed above may be) has vitiated the Humours by long continuance, it will be first to lessen these Humours so corrupted, by bleeding and Purgings, if the Patient has sufficient Strength, before we endeavour to invigorate the Blood: and which indeed we can scarce do, whilst a feculent heap of Humours lies in the way. But for as much as Pains, Vomiting, and Looseness are sometimes so very severe, that they will not bear a Truce so long, until we have satisfied the first Intention of fortifying the Blood; therefore we must begin the Cure sometimes by quieting the Symptoms, (the cause being let alone a little while) with some *Anodyne* Medicine, and then we must endeavour to rectify the Spirits, the infirm Constitution whereof is the cause of this Disease, and so to cure such kind of Symptoms: And because we find by Experience that there are many striking things that will quell the Inordination

dination of the Spirits, and retain them in their places, (and are therefore called Hyftericks) we must use them when we would answer such Intenptions.

According to what has been said, I order the Sick to be Blooded in the Arm, and that after she be purged Three or Four Mornings following; but the Woman thinks her self worse after those days she is Blooded and Purged in; for these Evacuations promote the Disorder, which I take care to forewarn her of, that she may not despair, the Disease of it self being apt to incline her to do so; yet notwithstanding those vicious Humours, we suppose are heap'd up by the long continuance of the Disease, are in some sort to be evacuated, before we can conveniently answer the chief Intention.

After these Evacuations I order some *Chalybeate* Remedy to be taken Thirty Days to strengthen the Blood, and so by consequence, the Spirits that proceed from it; and nothing will more certainly answer your Intention in this Case, for it raises a Volatile Ferment in the Vapid and Languid Blood, whereby the weak Spirits are roused, which before were pressed down by their own weight, and this is very manifest; for as often as Steel is given in the Green-sickness, the Pulses are manifestly greater and quicker, the outward Parts grow warm, and the pale and dead Countenance is changed, and becomes fresh and lively. But here it is to be noted, that Bleeding and purging must not be always used before Steel Medicines, for when the Sick is weak, and almost worn out by the long continuance of the Disease, they may and ought to be omitted, and you must begin with Steel, and this must be well minded.

But in my Opinion it is most conveniently given in Substance; and as I have never seen nor heard, that so taken it ever hurt any Body, so I have been fully satisfied by frequent Experience, that the bare Substance performs the Cure sooner and more effectually than any of the common Preparations of it; for busie Chymists make this as well as other excellent Medicines, worse rather than better by their perverse and over-officious Diligence. I have also heard (and if it be true, it much fortifies our Assertion) that the crude Mine as it is digged out of the Earth, is more effectual in curing Diseases, than Iron

that has passed the fire, and been purified by melting; so the Author asserts, but I have not as yet tryed, whether it be so or not. This I am certain of, that no excellent and effectual Remedy has been any where made, which has not received its chiefest Virtues from Nature; upon this Account grateful Antiquity called excellent Medicines, God's Workmanship not man's. And that some excellent thing does produce wonderful Effects by its native Goodness and Efficacy, in what form soever it be taken, may be proved by *Opium*, or the Jesuits Bark. Nor is a Physician's skill so much perceived by preparing Medicines, as by chusing such as are fit, which Nature has prepared with her own Fire, and freely bestowed on us, so that all we have to do is to reduce Medicines to such a form; as that either their Substance, or their Virtue and Efficacy may be better imparted to our Bodies; for the performance whereof, we are sufficiently instructed. Next to the Substance of the Steel, I chuse the Syrup of it, prepared with the Filings of Steel, or Iron, infused in Cold in Rhenish Wine, till the Wine is sufficiently impregnated, and afterwards strained, and boyled to the Consistence of a Syrup with a sufficient quantity of Sugar.

Nor do I use any purging Medicine at set times, during the whole *Chalybeate* Course, for I think the Virtue of the Steel is destroyed by a Purge, both in Hysterick and Hypochondriack Diseases; and when my chief Design is to reduce the Spirits to order, and to renew and confirm their System, if I should use the gentlest Purge but once, I should undo all that I had done in a Week before, and so by pulling down what I had built, and by Building what I had pulled down, I should trifle with my self and Patient too; and I believe Mineral Waters, which participate of an Iron Mine, are rendered less effectual by this means, tho' I know that some have been cured, when Purges have not been given only now and then, but daily with the Steel, which does not so much prove to me the Discretion of the Physician, as the extraordinary Virtue of the Steel; for if they had been omitted, the Cure would have been performed in a less time.

Nor truly do I see what advantage Purges often repeated may produce in many other Diseases, besides that
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just mentioned; for tho' it cannot be denied, that they clear the Intestines of Impurities, and likewise that they somewhat discharge ill Humours; that are lodged in the Mass of Blood; yet on the contrary, it is no less certain, that when they are frequently repeated in weak Bodies, especially in the tender Age, they may do much hurt; because thereby a great many Humours are drawn to the Intestines, and being put off upon these parts, occasion Preter-natural Ferments, whereby Tumors arise in the Belly, increasing daily so much the more, by how much the oftner the Sick is purged, and at length it happens; that those parts by reason of weakness, (being as it were overwhelmed with a burthen of Humours) and by a defect of natural heat; soon become tabid and putrefied; and sometimes also the Oeconomy of the Bowels being quite subverted, by reason of the Causes mentioned; Preter-natural Kernels like the King's-Evil, and the like; grow upon the Mesentery, and make way for Death; for these Reasons I judge it is safest in Children after general Evacuations; and those but very few, to direct the curative Indication so as to comfort the Blood and Bowels, which may be done with Spanish Wine alone, or with corroborating Herbs in it, if Morning and Evening some Spoonfuls of it; according to the Age of the Sick; are given long enough. And because things outwardly applied, can easily penetrate the tender Bodies of Infants, and so thoroughly affect the Blood with their Virtue, whatever it is; it will be proper in Swellings of their Bellies, whether caused by the King's-Evil, or the true Rickets, to use Liniments that are proper to corroborate the Blood and Bowels, and likewise to cure any Morbifick Indisposition of them.

Take of the Leaves of common Wormwood, of the Lesser Centaury, of White Horchound, Germaner, Groundpine, Scordium, common Calaminth, Feverfew, Meadow Saxifrage, St. John's Wort, Golden-rod, Wild Time, Mint, Sage, Rhue, Carduus Benedictus, Penny-Royal, Southern-wood, Camomile, Tansie, Lily of the Valleys, all fresh gathered and cut, each one handfull; of Lard four Pounds, of Sheeps-suet, and Claret-wine, each a Quart: Let them be infused in an Earthen-pot upon

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boil ashes for twelve hours, and then let them boyl till all the watry part is consumed, afterwards strain them, and make an Oynment, wherewith let the Belly and Hypochonders be anointed Morning and Evening, for Thirty or Forty days following, and also both the Arm-pits.

But as to the Rickets this must be noted, that in those Tumours, that seized the Bellies of Infants heretofore after long Agues not much unlike the true Rickets, Purges repeated seem to be indicated. For before the use of the Jesuits powder, Agues continued a long while, and put off a Sediment, which was the cause of Tumors of this kind, which could be only carried off by Purges repeated; but Catharticks are not to be used in the Rickets above once or twice at the most, before the Sick enters upon the use of Alteratives; and let him take inwardly of the Wine above-mentioned, all the time the parts are anointed, or let him use, if it may be, for his ordinary drink, Beer with the forementioned Herbs, or at least several of them put up with it, in the Vessel. Lastly, what I have now hinted ought to be carefully minded, for I am well satisfied that many Infants and Children have been ruined by Purges repeated often, which perhaps were given to allwage the Belly. But this by the bye.

If any one object that the Fillings of Steel may injure those that take them by sticking in their Guts, unless they are purged now and then. I answer first, that I never found any such thing in any one, and besides it is much more probable, that being involved with the slime, and with the Excrementitious Humours of the parts, they should at length all pass away with them, than when they are exagitated by purging Medicines, which cause unusual Compressions, Twisting and Contraction of the Bowels, whereby the Fillings of the Steel thrust upon the coats of the Guts may penetrate deeper into them.

When the Sick is in a Steel-couse, Remedies commonly called Anti-Hystericks are to be used, as it were by the bye, (to comfort the Blood and Animal Spirits) in that manner and form, which is most agreeable to the Patient; but if she can take them in a solid form they will more powerfully retain the Spirits in their Office and Place, than things that are Liquid, that is, ei-
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ther Decoctions or Infusions, for the Substance it self affects the Stomach longer with its Savour, and works more forcibly upon the Body.

Upon the whole, being about to answer all the Indications which I have mentioned above, I use to order these few and common things, which tho' they are not at all pompous, yet they most commonly do what I design. Let eight Ounces of Blood be taken from the right Arm.

Take of Galbanum dissolved in Tincture of Castor, and strained, three Drams; Tacamahacca two Drams; make a Plaster to be applied to the Navel; the next Morning, let her enter upon the use of the following Pills.

Take of Pil. Coch. Major two Scruples, of Castor powdered two Grains, of the Balsam of Peru four drops; make four Pills, let her take them at five in the Morning, and sleep after them; repeat them twice or thrice every Morning, or every other Morning according to their Operation and the Strength of the Patient.

Take of the waters of Black-Cherries and of Rue and of compound Briony-water, each three Ounces, of Castor tied up in a rag, and bung in the Glass, half a Dram, of fine Sugar a sufficient quantity; make a Julep, whereof let her take Four or Five Spoonfuls, when she is faint, dropping into the first Dose, if the Fit be violent, twenty drops of the Spirit of Haris-born.

After the purging Pills above described are taken, let her use the following.

Take of the Filings of Steel Grains eight, with a sufficient quantity of extract of Wormwood, make two Pills; let her take them early in the Morning, and at Five in the Afternoon for thirty days, drinking upon them a draught of Wormwood-wine. Or for daily use;

Take of the Filings of Steel, and of extract of Wormwood, each four Ounces; mingle them and keep them for use; let her take at the same time fifteen Grains, or a Scruple made in three Pills. Or if she likes a Bolus better,

Take

Take of Conserve of Roman Wormwood, and of the Conserve of the yellow Rind of Oranges, each one Ounce; of candied Angelica, Nutmegs. candied, and of Verica Treacle, each half an Ounce, of candied Ginger two Drams, make an Electuary with a sufficient quantity of Syrup of Oranges: Take of this Electuary one Dram and an half; of Filings of Steel well rubbed eight Grains; make a Bolus with a sufficient quantity of Syrup of Oranges to be taken in the Morning, and at five in the Evening, drinking upon it a draught of Wormwood-wine.

Take of choice Myrrh and Galbanum, each one Dram and an half, of Castor fifteen Grain, with a sufficient quantity of Balsam of Peru; make twelve Pills of every Dram; let her take three every Night; and drink upon them three or four Spoonfuls of compound Briony-water through the whole Course of this Process.

But if these Pills move the Belly, which sometimes happens in Bodies that are very easily purged, by reason of the Gum that is in them, the following are to be substituted.

Take of Castor one Dram, of Volatile Salt of Amber, half a Dram, with a sufficient quantity of extract of Rbue; make twenty four small Pills, let her take three every Night.

But here we must take notice, that Steel Medicines in whatsoever Form or Dose they are taken, cause sometimes in Women great disorders both of Body and Mind, and that not only on the first days, which is usual almost in every Body, but also, all the time they are taken. In this Case the use of Chalybeats must not presently be interrupted, but Laudanum must be given every Night for some time, in some Hysterick-water, that they may bear it the better.

But when the Symptoms are gentle, and it seems that the business may be done, without taking Steel, viz. when the Disease is small, I think it sufficient to Bleed;

and to purge three or four times, and then to give the altering Hysterick Pills above-mentioned, Morning and Evening for ten days, which method seldom fails, when the Disease is not violent; yea the Pills alone, Bleeding and Purging being omitted, oftentimes do a great deal of good.

Yet it must be carefully noted, that some Women, by a certain *Idiosyncrasy* do so abhor Hysterick Medicines, (which give ease in most of the Symptoms of this Disease;) that they do not only not receive Benefit, but are thereby much injured; therefore they must not be prescribed for such; for *Hippocrates* says, it is to no purpose to do any thing contrary to Nature's inclination, which *Idiosyncrasy*, is indeed so great and so common, that if we have not regard to it, the Lives of the Sick may be endangered, and not only by Hysterick Medicines, but by many other, whereof I will at present mention but one, *viz.* that some Women, that have the Small-pox cannot bear the use of *Diaerodium*, for Giddiness, Vomiting, and such Symptoms belonging to Hysterick Diseases are occasioned thereby; and yet *Liquid Laudanum* agrees very well with them, which I observed whilst I was writing this, in a young Woman, a person of Quality, to whom I had given the said Syrup on the Sixth and seventh Night; the Symptoms above-mentioned invaded both Nights; nor did the Inflammation of the Pustles duly proceed; but after she had used *Laudanum*, she was quite freed from the said Symptoms, the swelling of the Face, and Pustles daily increasing, the Anxiety and Restlessness of the Body and Mind (which used to be as it were a Fit of the Small-pox) was wholly removed, as often as this *Anodyne* was given, the Patient being strengthened and revived by it. But this by the bye.

And so Hysterick Diseases are most commonly cured, and most Obstructions of Women, but especially a *Chlorea*, or Virgin's pale Colour, and also all Suppressions of the Courses. But if the Blood is so very weak, and the Confusion of the Spirits so great, that Steel ordered to be used according to the Method prescribed is not sufficient to cure the Disease, the Sick must drink some Mineral waters, impregnated with the Iron Mine, such are *Iron bridge*

bridge-waters, and some others lately found out; for the Chalybeate Virtue of these is better mingled with the Blood, by reason of the great quantity that is taken in; and also because they are most agreeable to Nature; and they cure Diseases more effectually than Iron, how much soever exalted by Art, as Boasting Chymists talk.

But this is more especially to be taken notice of in drinking of them, viz. if any Sickness happens that is to be referred to Hysterick Symptoms, in this case the Patient must forbear drinking them a Day or two, till that Symptom that hinder'd their passage is taken off; for tho' these Waters are less apt to stir the Humours, and so to cause a Confusion of the Spirits than the gentlest Purger of the Shops, yet they do somewhat stir them as they force Urine, and also often purge by Stool too; but if the Waters themselves hinder their own passage, by disturbing the Humours and Spirits, let those consider how incongruously they ask who order purging Medicines to be given once or twice a Week, while the Sick is drinking these Waters, or which is yet more impertinent, to be mixed with the Waters, whereby these and other Mineral-waters pass more difficultly.

And here I must inform you, that tho' some think Iron is in these Waters in principle soluti (which is plainly the same as if we should suppose liquid Iron) yet I do not at all doubt, but that they are simple Waters impregnated with the Mine, through which they pass, which will appear to any one, if he pour some Gallons of Water on a sufficient Quantity of rusty Nails; for then he will perceive that this Water, when the Powder of Gauls or the Leaves of Tea, or the like, are put into it, will plainly appear of the same Colour with the Waters of a Mineral-fountain, when such things are cast into them. Nor indeed have these artificial or insartificial Waters (which you please to call them) when they are taken different effects, if they are used in the Summer-time, and in a good Air.

But however it be, if the Disease because of its Opacity does not yield to Chalybeate waters, the Sick must use some hot Sulphureous waters, such as our Bath, and when he has used them inwardly three Mornings following, the next Day let him go into the Bath, and the Day

following let him drink them again; and so let him do by Turns for two whole Months; for in these and in others of what kind soever they are, this must be carefully observ'd, that the Sick must persist in the Use of them, not only till he receives some benefit, but till he is quite well, that the Symptoms may not soon return.

Venice Treacle alone if it be used often, and a long while, is a great Remedy in this Disease, and not only in this but in very many other Diseases, that proceed from want of Heat and Concoction, or Digestion; 'tis perhaps the most effectual that has been hitherto known, how contemptible soever it may seem to most People, because 'tis common, and has been a long while known.

Spanish wine medicated with Gentian, Angelica, Wormwood, Centaury, the yellow Rind of Oranges, and other Corroboratives infused in it, does much good; some Spoonfuls of it being taken thrice a Day; if the Woman be not of a thin and cholerick Habit of Body; and indeed a large Draught of Spanish wine by it self taken at Bed time, for some Nights by my advice has done much good to some Hysterick Women; for by it the Habit of the whole Body was render'd stronger, and they who before were Cachectick, became fresh colour'd and Brisk.

Moreover we find sometimes that the Jesuit's powder wonderfully comforts and invigorates the Blood, and Spirits; a Scruple whereof taken Morning and Evening for some Weeks, has, as I have observed, restored (both to Hypochondriack Men and Hysterick Women that have been very sick a long while, and when the Oeconomy of their Bodies has been much weakened) a firm and healthy Constitution; but it succeeds best in that kind of Hysterick Diseases wherein Women are affected with Contractions, so that they struggle violently and beyond the Strength of Women; and at the same time beat their Breasts; yet it must be confessed that this Medicine does not so certainly and so often cure this Disease as Agues; but tho' to mention this by the bye, the Jesuit's powder does wonders in curing Agues; and tho' we use it freely our selves, and give it our Wives and Children, as often as there is occasion, yet there are some at this present so much displeased with it, because it cures so certainly and so fast, as they were heretofore, because it was lately known

known amongst us. To which Fate the best Men, and most excellent Remedies have been almost always exposed; but by this we try as by a Touch-stone our dispositions, and from thence judge whether we are good or ill Men, viz. according to the degree of our joy or grief, as oft as the Welfare of Mankind is promoted by some common Benefit or Blessing of God.

But if any of the Remedies above-mentioned do not well agree, which often happens in cholerick and thin Constitutions, then a Milk-diet may be used. For some Women (which wou'd seem strange at first) that have been troubled a long while with Hysterick Diseases, and even such as have frustrated all the Endeavours of Physicians, yet have recover'd by dieting themselves for some time only with Milk, and especially those that labour with that Disease, I call an Hysterick Cholick, which cannot be quiesced by any thing but Narcoticks, to which repeated by Intervals the Women are much accustomed, the Pain returning as soon as the Virtue of the *Anodyne* fades. But this is chiefly to be wonder'd at in this Method of Cure, viz. That Milk which yields only a cold and crude Nourishment, shou'd notwithstanding by use strengthen and invigorate the Spirits, and yet this will not seem disagreeable to reason, if you consider that Milk yielding only a simple Nourishment, does not busie Nature much in concocting it; for what Meats and Liquors more compounded do, and that an equal Temper of the Blood and Spirits necessarily follows that perfect Concoction, for this must be also consider'd, that a bare Weakness of the Spirits considered by it self, is not the Cause of those Confusions they are under, but the Weakness of them compared with the State of the Blood. For it may be an Infant has Spirits strong and firm enough with respect to its Blood, but yet not proportionable to the Blood of a grown Person. Now when by the continual use of a Milk-diet (tho' it is crude and weak) the Blood is rendred more soft and tender, if the Spirits that are made by it, are only equal to it, all is well. Yet all are not able to undergo those Inconveniencies which most commonly accompany it the first Days, namely because it curdles in the Stomach, and is not sufficient to maintain the ordinary Strength of the Body; but if they could, they might receive benefit by it.

But nothing of all I have hitherto known, does so much comfort and strengthen the Blood and Spirits, as riding much on Horse-back every Day for a long while; for since by this kind of Exercise the lower Belly is most strongly moved, in which the Vessels for Excretion (as many as are appointed by Nature to drain the Impurities of the Blood) are situated: What disorder of the Functions or other natural Impotence of the Organs, can be imagined so great as not to be helpt by the frequent jolting of the Horse, and than too in the open Air? Whose innate Heat is so extinguished, that it cannot be stirred up by this Motion and Ferment afresh? Or what preternatural Substance or depraved Juices can there be in any creek of these Parts, which cannot by this Exercise of the Body, be either reduced to such a Constitution as is agreeable to Nature, or scattered every way and ejected? Moreover the Blood being perpetually exagitated by this Motion, and thoroughly mixed, is as it were renewed, and grows vigorous again. And indeed this Method, tho' it is inconvenient for Women that are accustomed to a slothful and delicate way of living, for they may be injured by Motion, especially in the beginning; yet it is very proper for Men, and soonest restores their Health. One of our Reverend Bishops, famous for Prudence and Learning, having studied too hard a long while, fell at length into an Hypochondriack Disease, which afflicting him a long time, vitiated all the Ferments of the Body, and wholly subverted the Concoctions. He had passed through long steel Courses more than once, and had tried almost all sorts of Mineral-waters, with often repeated Purges, and Antiscorbuticks of all kinds, and a great many restorative Powders, which are reckoned proper to sweeten the Blood: And so being in a manner worn out, partly by the Disease, and partly by Physick used continually for so many Years, he was at length seized with a colligative Looseness, which is wont to be the Forerunner of Death, in Consumptions and other Chronical Diseases, when the Digestions are wholly destroyed. At length he consulted me: I presently considered that there was no more room for Medicine, he having taken so many already, without any benefit; for which reason I advised him to ride a Horse-back, and that first he should take such a small Journey as was agreeable to his

weak Condition; had he not been a judicious Man, and one that considered things well, he would not have been persuaded so much as to try such a kind of Exercise. I entreated him to persist in it daily, till in his own Opinion he was well, going daily further and further, till at length he went so many Miles, as prudent and moderate Travellers, that go a large Journey upon business, use to do, without any regard to Meat or Drink, or the Weather; but that he should take every thing as it happens, like a Traveller. To be short, he continued this Method, encreasing his Journey by degrees, till at length he rode twenty or thirty Miles daily: And when he found he was much better in a few Days, being encouraged by such a wonderful Success, he followed this Course for a pretty many Months, in which, as he told me, he rode many thousand Miles, so that at length he not only recovered, but also gained a strong and brisk habit of Body.

Nor is this kind of Exercise more beneficial to Hypochondriacal People, than to those that are in a Consumption; whereof some of my Relations have been cured by riding long Journeys by my advice: for I knew I could not cure them better by Medicines of what value soever, or by any other Method,

Nor is this Remedy proper only in small Indispositions accompanied with a frequent Cough and Leanness, but also in Consumptions that are almost deplorable; when the Looseness above-mentioned accompanies the Night Sweats, which is wont to be the Fore-runners of Death in those that die of a Consumption. To be short, how deadly soever a Consumption is, and is said to be, two thirds dying of it; which are spoiled by Chronical Diseases: Yet I sincerely assert, That Mercury in the French Pox, and the Jesuits-bark in Agues, are not more effectual than the Exercise above-mentioned in curing a Consumption, if the Sick be careful that his Sheets be well aired, and that his Journeys are long enough. But this must be noted, That those that are past the Flower of their Age, must use this Exercise much longer than those that have not yet arrived to it; and this I have Learned by long Experience, which scarce ever failed me. And tho riding on Horse-back is chiefly beneficial to People that have a Consumption, yet riding Journeys in a Coach, is somewhat very beneficial.

But to return to the business in hand, this is the general way of Cure in this Disease, which is applied to the original Cause, viz. the weak Constitution of the Blood, and is to be used only when the Fit is off; therefore as often as the Fit invades, joyned with any one of the abovementioned Symptoms, if the Disease be such, or so great an one, that it will not bear a Truce, till it may be cured by Medicines that strengthen the Blood and Spirits, we must presently use Hysterick Medicines, which by their strong and noisom Smell, recall the exorbitant and deserting Spirits to their proper Stations, whether they are taken inwardly, or smelt to, or applied outwardly: Such are *Assa Fetida*, *Galbanum*, *Castor*, Spirit of *Sal Armoniack*: And lastly, whatever has a very offensive and ungrateful Smell.

And indeed, whatever Stinks is proper for this intemperion, whether it is naturally ill scented, or made so by Art; and, unless I am decieved, Spirits of Harts-horn, of humane Blood, of Urine, and of Bones, and the like, take their chief Virtues from the force of the Fire, in their preparation contracting an ill scented *Empyreuma*, which is intimately joyned with their Essence, which is also perceived in Fumes arising from Feathers, and such kind of parts of Animals, when they are burnt, for this is common to the Substance of all Animals, viz. to emit a stinking Fume, while they are burning; and if it is forced by Fire, and received in Glasses, when it is condensed, it turns to those Liquors, called Volatile Spirits, which assume Faculties that were not in the beginning in their Subjects, and are indeed only Creatures of Fire, and their Vertues are truly all the same, from whatever Substance (so it be Animal) they are extracted.

In the next place it is to be observed, that if some intolerable Pain accompanies the Paroxysm, in what part soever it is, or violent Vomiting, or a Looseness; then besides the Historicks above-mentioned, *Laudanum* must be used, which only is able to quill these Symptoms.

But in quiering these Pains, which are caused by Vomiting, we must take great care, that they are not restrained, either by *Laudanum*, or any other *Anodyne*, before due Evacuations have been made, unless they almost exceed all humane Patience. First, because sometimes there

there is so great a quantity of Blood and Humours heapt up, (especially in Sanguine Women, and Men of a proper Habit) that it is able to resist the Operation of the most effectual *Anodyn*, though it be often repeated; and therefore in such, Blood must be necessarily drawn from the Veins of the Arm, and a Purge must be given before the use of *Laudanum*. For when these things are orderly performed, that which before would do no good given in a large Dose, will now do the business in a moderate Dose. And then, because I have found by long Experience, that when the Sick has been used by little and little to *Laudanum*, and has not been duly evacuated before, she was forced by reason of the return of the Pain, presently after the Virtue of the Medicine vanished, to take an *Anodyne* again; and so daily for some Years, the Dose being sometimes by degrees increased, so that at last they can by no means be without *Laudanum*, tho' thereby all the Digestions are spoiled, and the natural Functions weakened, though I do not think that the Use of *Laudanum* does immediately hurt the Brain or Nerves, or the Animal Faculties. Therefore I judge, and speak what I have found, That Evacuations ought to precede Purgatives, viz. in Viragoes, and in Women that abound with Blood, a Vein must be opened, and the Body purged, especially if they have been lately seized with the Fit. But if the weak Women and those of a quite contrary Constitution, labour with such a Fit and Pain, and have been not long ago assisted with it, it will be sufficient to cleanse their Stomachs with a Gallon of Posset-drink, more or less, drunk and vomited up again; and then to give a large Dose of Venice-Treacle, or of Orvietan, and a few Spoonfuls of some spirituous Liquor, that is pleasing to the Taste, with a few Drops of liquid *Laudanum*, to be taken immediately after.

But if the Sick has vomited a great while before the Physician was called, and there is danger, lest by a further provocation by Emeticks, the Spirits should be enraged, and the Sick too much weakened; in this case you must give *Laudanum* without delay, and such a Dose as is not only equal to the Violence and Duration of the Symptom, but such an one as is able to conquer it.

But

But here two things are to be chiefly observed: First, That, when you have once begun to use *Laudanum*, after due and necessary Evacuations, it must be taken in that Dose, and often repeated, till the Symptom is quite vanquished; only such a space must be betwixt each Dose, that we may know what the former has done, before we give another. But I have spoken largely of this in another place. And then when we treat the Disease with *Laudanum*, we must do nothing else, and nothing must be evacuated; for the mildest Clyster of Milk and Sugar, is sufficient to ruin whatever has been repaired by the *Anodyne*, and to occasion the return of the Vomiting and Pain.

But though the foresaid Pains as has been said, are apt to vanquish the force of the *Anodyne*, yet violent vomiting indicates the largest Dose of it, and that it should be frequently repeated; for by the inverted Peristaltick Motion of the Stomach, (by which, that which is contained in it ought to be carried downwards) the *Anodyne* is rejected by the *Oesophagus*, before it can produce any effect, unless after every time the Sick Vomits, the *Anodyne* be given afresh, and especially in a solid Form; or if it be given in a Liquor, the Vehicle must be so small, as that it may but just wet the Stomach, so that the reason of the small quantity of the Matter, it cannot be cast up; for instance, some drops in a Spoonful of strong Cinnamon-water, or the like; and the Sick must be told to keep her self quiet, presently after taking the *Laudanum*; and that she keep her Head as much as is possible immovable, for the smallest Motion of the Head, stirs up Vomiting more than any thing else, and when the Medicine that was just taken is vomited up. Moreover, when the Vomiting ceases, and is as it were overcome, it is expedient to give a Purgative Morning and Evening for a few days, to prevent a relapse; which also ought to be observed after a *Diarrhea*, or an *Hysterick Pain* taken off by an *Anodyne*. And so at length by this Method we may readily cure the *Symptomatick Pain* and Vomiting; whereby, because they are very often like other Diseases, Physicians are easier imposed upon, than by any other Symptoms whatever, that require their help; concerning which I will add a few things: For instance, in that kind of *Hysterick Disease*

now mentioned, which resembles a *Nephritick Pain*; is not the great Parity and Similitude of both Diseases evident to any one, both because the Pain in both is in the same part, and also for that the Woman Vomits in both Diseases; and yet they are produced from Causes differing from one another; and the method for the cure of them, so unlike, that that which helps in the one does hurt in the other, and so on the contrary? For whether a Stone or Gravel fretting upon the Substance of the Reins, produces Pain, and by consent of parts, Vomiting, nothing is so effectual, as very large and frequent Revulsion of the Antecedent cause by Blood-letting, and Dilatation and Laxation of the passages, by which the Stone is to be excluded, by Emollient Glysters often repeated, and inward Medicines of the same kind, to which are to be added *Lithonriptick* and *Diuretick* Medicines. Now if the said Symptoms do no way arise from the Stone, but from the Animal Spirits, rushing impetuously in a great quantity upon the Kidneys, (in which Case, *Anodynes* are only indicated; nor are the gentlest Glysters injected after the first Evacuations without danger) what great hazard the unhappy Woman is put into, whose Life is trifled with, I need not say. The same may be affirmed of that *Hysterick Disease*, which resembles the *Bilious Cholick*, or the *Liver Passion*, when it is taken for granted, that the Disease (tho' of a quite different, yea contrary Nature) is the *Bilious Cholick*, and proceeds from a sharp Humour cast upon the Bowels, by the Mouths of the *Mesenterick Arteries*; into which Error the vehement Pain, and the Green Colour of the Matter expelled by Vomit and Stool, easily seduces the unwary and unthinking Physician) what method is so proper, as that whereby we endeavour to attenuate the sharpness of the Humours by the help of cooling and incrassating Medicines? And what is fitter than *Catharticks* frequently given, besides Glysters daily injected to exterminate the Humours from the Guts, especially *Mercurius Dulcis* mixed with *Diagrydate* Medicines, to eradicate perfectly the *Morbifick* matter? But it is plain to every one, how ill the Patient would be treated, and in what hazard he would be, whilst we insist upon this method, if the Disease which is supposed to be a *Bilious Cholick*

Cholick, should really prove an Hysterick or Hypochondriack Symptom, when Experience openly proclaims, that after the first general Evacuations (which are appointed to remove the rubbish of the putrefying Humours, which the Ataxy has occasioned, whereby the Virtue of the *Anodyne* may be obtruded) nothing remains to be done, besides the mitigating of the tumultuous Spirits, till the Symptoms go off, and afterwards it will be proper to give Steel Medicines, or any other Remedy, if there be any that by kindling, and invigorating the Blood, may root out the Disease. It is not my business to reckon those great Miseries, which I have known befall Women, when this Hysterick Cholick has been supposed, to proceed from Choler, nevertheless I affirm that Evacuations often repeated, which are indeed indicated in the *Bilious* Cholick, have been so far from lessening the Pain and Vomiting, that they have stirred them up more, by promoting the disturbance of the Spirits, which is the true cause of these Symptoms: And at length the Disease being prolonged for some Months, ends in Convulsions, there being a sudden Translation to the Brain, whereby the Sick is soon destroyed, and especially when after other Evacuations repeated a long time, by reason of the Green colour of those things which are vomited up, a Vomit is given. To be short, if I have learnt anything by Observation, I judge we must chiefly take care, that those Symptoms familiar to Hysterick Women, be not supposed by a mistake in the *Diagnostick*, to proceed from other Diseases, which they often resemble.

And here I must acquaint you, that besides the Errors above-mentioned, whereby Women subject to Hysterick Diseases, are put in danger of their Lives; very many moreover, suffer by these Diseases, by an Error no less fatal, at a time wherein, tho' this Disease is not of its own Nature deadly, yet by reason of the Disasters that come upon it and follow it, it is fatal to many: For instance, a Woman of a tender and weak habit of Body, brings forth a Child, and all succeeds well, and according to Nature. The Midwife, whether rude and unskillful, or Vain-glorious, to shew how well she has performed her business, advises, that her Woman should rise a few days after she has been Delivered, and that she should keep up

a while; the Woman does so, and is presently seized upon the first Motion of her Body, with an Hyfterick indisposition, and according as the Disease increases, the *Lochia* are first lessened, then quite stopped, whose untimely suppression a long Train of Symptoms follow; which soon destroys the Sick, unless great Diligence and Skillfulness intercede. And sometimes they are seized with a Phrensie on this account, which growing daily worse and worse, causes Convulsions first, and then Death. But if they escape they are maddish, and sometimes continue so their whole Life-time. Sometimes after the suppression of the *Lochia*, they fall into a Fever, which either turns to that which is then Epidemical, or depends only on that beginning. Moreover, the same Hyfterick Symptoms which were first occasioned by the suppression of the *Lochia*, rage more now, as if afterwards they proceeded from it. I was of Opinion long ago, that of those Women that die in Child-bed, scarce one in ten, to speak within bounds, dies, because she has not Strength necessary for Delivery, or from the Pains that accompany difficult Labour, but chiefly, by reason they rise too soon, Hyfterical Fits being produced by that Motion, whereby when the *Lochia* are stoppt, a numerous Series of dreadful Symptoms follows. Wherefore they that follow my Advice, keep in Bed at least till the tenth day, if they are of a weakly Constitution, especially if they have been long since troubled with Vapours. For beside that the Rest they have in Bed, frees them from these Dangers, we have so often made mention of; the warmth of the Bed not interrupted likewise refreshes the Spirits, weakened and exhausted by the Pains in Labour, and by the Evacuations usual in this Case, and recruits Nature, and digests and removes all those Crudities, which are heapt up during the time of Child-bearing.

But if by reason of this Error committed, any one of the said Symptoms supervenes, the curative Indications are to be directed so, that the Spirits disquieted by this Motion should be appeased, and that the *Lochia* should flow again, for as much as the stoppage of them is the next and immediate Cause of these Symptoms. But we must not obstinately insist upon this Method, but having given a while those Remedies, that are wont to be
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used successfully in this Case; if they do not answer according to our Desires, we must leave them off; for as strong things must not be used, so neither ought we to persevere in the use of gentler, by reason Women in Child-bed so affected are much weakened, and their strength almost worn out. For instance, when it first appears that the *Lochia* are stop't, it is proper to put the Women presently to Bed, and then to apply an Hysterick Plaister to the Navil, and to order this following Electuary to be taken forthwith.

Take of the Conserve of Roman Wormwood, and of Rhenish, each one Ounce, of the Treacles of Myrrh two Drams, of Castor, English Saffron, of Volatile Salt of Sal Armoniac, and of Asa Fetida, each half a Dram, make an Electuary with a sufficient quantity of the Syrup of the five opening Roots; let her take the quantity of a large Nutmeg every third hour, drinking upon it four or five spoonfuls of the following Julep.

Take Rue-water, compound Briony-water, each three Ounces; of Sugar-candy a sufficient quantity, mingle them, make a Julep.

And if these Remedies are given as soon as the Suppression begins, the Disease is most commonly conquered; but if having continued the use of the said Medicines, till the whole quantity is taken, the *Lochia* are still stop't, in this Case we must try *Laudanum*, at least for once, tho' of its own Nature it is Astringent, yet by quieting the disturbance of the Spirits, whereby the usual Evacuation of the *Lochia* is interrupted, it does sometimes much good, and when *Emmenagogues* do no good, it may bring back the Flux of the *Lochia*; but *Anodynes* are most conveniently given with *Hystericks* and *Emmenagogues*: For instance, Fourteen drops of Liquid *Laudanum*, in compound Briony-water, or one Grain and an half of Solid *Laudanum* made into two Pills, with half a Scruple of *Asa Fetida*. But we must be sure to take notice, that if we do not hit the Mark at once, if the *Lochia* do not follow, we must by no means repeat the *Opium*, as is usual in other Cases, and ought to be: For if here the *Narcotick* is repeated, it will so powerfully stop the *Lochia*, that afterward they

they can by no means be provoked; for indeed if this do not succeed (some time being passed that we may know the effects of it) we must return to the use of *Emmenagogues*, mixed with *Hystericks*, and then inject a Glyster of Milk and Sugar; and what has been said before of *Opium*, holds good here likewise of Glysters; for unless the first injected bring down the *Lochia*, nothing is to be expected from more, one being sufficient by turning the Humour gently, to cause the *Lochia* to flow, but more may divert them another way. These things being done (which are to be touched on lightly) it is most safe, and the Duty of a prudent Physician, to wait and see what time will do, for every day the business of the Cure is more removed from danger, and if the Patient live beyond the Twentieth day, she is in a manner beyond danger. For when the Woman has been recruited a little, and gained some strength, in a long Disease whatsoever it is, she will be able to bear that Remedy, which is most proper for the Cure of that Disease, which was caused by a Suppression of the *Lochia*; Whereas Medicines crammed in obstinately, the first doing no good, may augment the Disease, and also the disturbance of the Spirits, from whence the Disease proceeds, which must be carefully observed.

Early a verruous Matron of good Quality sent for me; she upon the above-mentioned occasion, presently after she was brought to Bed, was seized with Hysterick Fits, and the *Lochia* suppressed. I endeavoured by the Medicines above-mentioned to provoke them, but to no purpose, the violence of the Hysterick Diseases being too strong for the Medicines; and at length when I perceived she would recover if I did nothing, I committed all to Time, by much the best and most successful Physician; and according to my Opinion things went well with her to the Fourteenth day: Visiting her every day, I found she was no day worse than she was the day before. After this the Woman that waited on her, whom I had kept hindered from doing mischief by her own officiousness, persuaded the Husband to have a Vein opened instantly in his Wives foot, which being performed, the Hysterick Fits so far prevailed, that within a few hours she was seized with Convulsions, and soon after by Death, thus ends all our Miseries.

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And if it be lawful to speak what I think, I have been a long time of the Opinion, that I have well performed the Duty of an honest Man, and a good Physician (not only in Diseases of Women in Child-bed, but also in all other acute Diseases, when I cannot certainly promise that a Cure will follow this or that Method I use) as often as I do nothing, when visiting the Patient, I find him no worse this Day than the Day before, and when I guess he will be no worse to morrow than he is to day; whereas if I proceed in curing the Patient after a method, whereof I do not yet know the Efficacy, he will be in hazard both upon the account of the Experiment I am about to make upon him, and also by the Disease, nor will he so easily get out of two Dangers as one. For tho' at present there is no evident Sign of his beginning to be well, yet it is very certain, that according to the Nature of acute Diseases, no one can always labour with them. And besides, every day will more and more secure the Sick, or afford an occasion to the Physician, whereby he may more opportunely and certainly conquer the Disease, than he could before. Which as it may be truly asserted of most Diseases, so especially of the Diseases of Women in Child-Bed, wherein the least Error may prove fatal, and in which we are so little able to govern that natural Evacuation, the stopping whereof causes the Disease we have been treating of.

But for as much as Hysterical Diseases do not always owe their Original to the prime cause, namely, the native weakness of the Spirits, but sometimes to an Adventitious Debility; therefore I intend before I make an end, to discourse of this sort of Cause, which most commonly is the cause of Vapours, as they are called; and it is an immoderate Flux of the Courses either in Child-bed, or at other times. As to the first kind that comes and is troublesome the first days after hard labour accompanied with a numerous Train of Hysterical Symptoms; and as it only comes, and is troublesome the first days, so it soon goes away, for a Diet that is somewhat thickening easily drives it away, for which also the following drink may be used.

Take of Plantain-water, and Red-wine, each one Pint, boyl them together till a third part is consumed, then sweeten it with a sufficient quantity of white Sugar, give half a Pint of it twice or thrice a day.

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In the mean while some very gentle Hyfterick Julep may be taken now and then, and the following *Nodulus* may be held to the Nose.

Take of Galbanum, and Assa Fœtida, each two Drams, of Castor one Dram and an half, of Volatile Salt of Amber half a Dram, mingle them and make a Nodulus. Or,

Take two Drams of Spirit of Sal Armoniack, to which let her smell often.

But as to the Flux when Women are not in Child-Bed, tho' that is wont to happen at any time, yet it comes most commonly a little before the time the Courses are about to leave them, viz. about the Age of Forty five, if they flow early, but about Fifty if they come somewhat later; from these, as is said, a little before they quite go away (like a Candle burnt to the Socket, which gives the greatest light, just as it is about to go out) they flow impetuously, and subject the poor Women almost continually to Hyfterick Fits, by reason of the great quantity of Blood, which is continually evacuated; now tho' in this Case Hyftericks both inward and outward must be used by the bye, (forbearing those that are strong, lest they should promote the Flux;) yet the main Intention must be to stop the Courses, which may be soon done in the following manner.

Let eight Ounces of Blood be taken from the Arm, the next Morning give the common purging Potion, which must be repeated every third day for twice; and every Night at Bed-time through the whole Course, let her take an *Anodyne*, made with one Ounce of *Diacodium*.

Take of Conserve of dried Roses two Ounces, of Troches of Lemnian Earth one Dram and an half, of Pomegranate-peel, and Red-coral prepared, each two Scruples, of Blood-stone, Dragons-blood, and Bole-Armenick, each one Scruple; make an Electury with a sufficient quantity of simple Syrup of Coral; let her take the quantity of a large Nutmeg in the Morning, and at Five in the Afternoon, drinking upon it six Spoonfuls of the following Julep.

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Take of the Waters of Oak-buds, and Plantain, each three Ounces, of Cinnamon water boyled, and of Syrup of dried Roses, each one Ounce, of Spirit of Vitriol a sufficient quantity to make it pleasantly Acid.

Take of the Leaves of Plantain and Nettles, each a sufficient quantity; beat them together in a Marble Mortar and press out the Juice, then Clarifie it: Let her take six Spoonfulls cold three or four times a day; after the first Purge apply the following Plaister to the Region of the Loins,

Take of Diapalma, and of the Plaister ad Herniam, each equal parts, Mingle them, and spread them on Leather.

A cooling and thickening Diet must be order'd, only it will be convenient to allow the Sick a small draught of Claret wine, once or twice a day, which tho' 'tis somewhat improper, by reason 'tis apt to raise the Ebullition, yet it may be allowed to repair the strength; and as indeed this is very Beneficial to Women thus affected, so it is also as useful for those that are in danger of miscarrying, only the Purge and Juices must be omitted.

There is another cause, though it is not so frequent, of Hysterical Diseases, viz. a falling of the Womb, by reason of hard Labour, it is accompanied with a large Train of this kind of Disease; yet is it soon and easily removed this way.

Take Of Oak-bark two Ounces, boyl it in four Pints of Fountain-water to two, add at the latter end one Ounce of Pomegranate-peel bruised, Red-roses, Granate-flowers, each two handfulls; and then add half a Pint of Red wine; strain it; bath the parts affected with Flannel-cloth dip in it, in the Morning, two hours before the Woman rises, and at Night when she is in Bed; continue the use of it till the Symptom is quite gone. But enough of this.

And now, worthy Sir, I have mentioned the chief of what has been hitherto observed in the History and Cure of this Disease, and having nothing else to do but to beg Pardon

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Pardon, if I have erred, in describing these things not so exactly as I ought to have done, and also to desire you to accept favourably of this small Treatise, which was designedly written to return you thanks for your Approbation of my other Works: And indeed I have so seldom received any thing of this Nature, that either I have merited no such thing, or else these candid and ingenuous men which, Nature has framed with such excellency of Mind, as to know how to be grateful, are very few, scarce so many as the Gates of *Tibbes*, or the Entries of wealthy *Nile*. Yet notwithstanding I endeavour all I can, and will do so, to learn and promote the Method of curing Diseases, and to instruct those that are less conversant in Practice than my self, if any such there are, let other People think of me what they please. For having nicely weighed, whether it is better to be Beneficial to men, or to be praised by them, I find the first preponderates; and much conduces to the Tranquility of Mind. But as for Fame and popular Applause, they are lighter than a feather, or a bubble, and more vain than the shadow of a Dream. But if any one thinks that Riches got by such a Reputation, have something more of solidity in them, let them enjoy what they have scraped together with all my heart; but let them remember, that some Mechanicks of the most sordid Trades, get and leave more to their Children, yet they do not exceed the Beasts in this, who take as much care as they can of themselves and theirs; and if we except things honest proceeding from the Judgment of the Mind and Virtue (whereof the Nature of Beasts is not capable) the Beasts are plainly as good as these, and all others who do not endeavour to do all the good they can in their Generation. Pray give my Respects to the Learned Mr. *Kinderick*, your and my good Friend, for he acquainted me of your Kindness to me, and I shall endeavour as much as I can to make the best returns of good Offices; for I Am,

Worthy Sir,

London Jan. 20.

Your Obliged Servant,

1680.

Tho. Sydenham

TREATISE OF THE GOUT and DROPSIE.

*To the Learned Dr. Thomas Short, Fellow of
the College of Physicians in London.*

I Dedicate to you, worthy Sir, this small Treatise of the Gout, and Dropsie, instead of a larger Volume I designed, I mean, the History of Chronical Diseases, especially of those my Practice was most conversant in. But by being too intent on these things, I occasion'd the worst Fit of the Gout I ever had, and therefore I was admonish'd thereby to lay aside these thoughts, tho' unwillingly; and to consult my own Health, and to be contented that I had in some sort finish'd these two Diseases; for as often as I fell to study, so often the Gout returned: Therefore I desire you would accept of this Work as it is, which I dedicate to you, for two reasons chiefly. First, because you have not doubted to declare to me, and before others, that have contemn'd them, the Usefulness of the Observations I published heretofore; and also, because in consultation with you, I have found your Genius disposed for the Practice of Physick: For tho' you are well skill'd in all sorts of Learning, yet Nature has rather determin'd you to those Subtleties, which arise from Practice, than to vain Speculations, which differ as

much

much from one another, as things of the greatest Moment and Children's Rattles do. And unless my Observation fails me, one Man seldom minds both. Your Sagacity accompanied with great Practice hath given you an opportunity of making Experiments, whereby you are become the chief Physician, and your extraordinary Civility will preserve the Esteem you have gained; if these things I discourse of now are not displeasing to you, to whom they are dedicated, and to a few more honest Men that are my Friends, I shall not much care what others say, who are offended with me upon no other Account, than because I have other opinions of Diseases and their Cures, than they have. And this is not in my Power to help; for I am so-made and disposed by Nature, that what time others spend in reading Books, I spend in Meditation, and I do not so much inquire whether others are of my Opinion, as whether what I deliver be agreeable to Truth. For I do not much esteem publick Applause, and truly what matter is it, if performing carefully the duty of a good Citizen, and serving the Publick to my own prejudice, I have no thanks for my Labour? For if the thing be rightly weighed, the providing for Esteem, I being now an Old-man, will be in a short time the same, as to provide for that which is not, for what advantage will it be to me after I am dead, that eight Alphabetical Elements reduced into that Order that will compose my Name, shall be pronounced by those who can no more frame an Idea of me in their Minds, than I can now conceive what those are to be, who will not know such as were dead in the foregoing Age; and perhaps will have another Language and other Manners, according to the Inconstancy, and Vicissitudes of all humane Affairs? But to what purpose should I be solicitous about the Opinion of others? For if my Endeavours have any way promoted the Knowledge of Diseases, or their Cure, and so I have deserved something of Praise on that Account, I cannot long enjoy it: And on the contrary, if my Writings displease any one, I think I shall scarce write any more; for by reason of Sickness I am not able to trouble the World with any more Physical Treatises; and truly I could not hold a Pen to write this small Treatise I now publish, but was

assisted, I must thankfully acknowledge, by Mr. *John Drake*, Bachelour of Physick in *Christ-College* in *Cambridge*, who by reason of his good Nature, and Integrity, is an excellent Friend, and his natural and acquired Endowments, will render him very serviceable to the Publick, when he pleases to practise that Art he so well understands. To conclude, worthy Sir, I must beg your pardon, if in performing my Duty, I have been any way troublesome to you, for I only designed to testify my Respects.

Your Humble Servant

Tho. Sydenham.

Of the GOUT.

Without doubt Men will suppose, that either the Nature of the Disease I now treat of is in a manner incomprehensible, or that I who have been troubled with it thirty four Years am a very dull Fellow, seeing my Observations about it, and the Cure of it, little answer their Expectations. But however it is, I will faithfully set down those things I have hitherto found, the Difficulties and the Intricacy either respecting the History of the Disease, or the Method of Cure, leaving them to be made clear and plain by Time the Guide of Truth.

The Gout most commonly seizes such Old men, as have lived the best part of their Lives tenderly and delicately, allowing themselves freely Banquets, Wine, and other spirituous Liquors, and at length by reason of the Sloth that always attends Old-Age, have quite omitted such Exercises as young Men are wont to use. Moreover, they who are subject to this Disease have large Skulls, and most commonly are of a gross Habit of Body, moist and lax, and of a strong and lusty Constitution, the best and richest Foundation for Life.

But

But the Gout does not only seize those that are corpulent, for sometimes also, though seldomer, it seizes thin Folks; nor does it stay always till they are old. For sometimes it invades such as are in the Flower of their Age, when they have received the ill Seeds of this Disease from their Parents by Inheritance; or if this is not the reason, they have too soon used Venery, or have wholly left off Exercise, that they used formerly violently; moreover, they have great Appetites, and have immoderately drunk spirituous Liquors, and afterwards of a sudden fell to thin and cooling Liquors.

When it first seizes any one when he is very old, it never afterwards has such exact Periods, nor is so violent as when it invades a Younger Man, because he dies most commonly, before the Disease attended with its proper Symptoms comes to its height, and also because the natural Heat and Vigour of the Body, being abated, it cannot be so Constantly and Violently thrust off on the Joynts: But if it seizes any one sooner, though it does not yet fix on one part, nor treat him so severely, but comes with uncertain Periods, occasionally paining a little, for a few days coming and going without any Method; yet it formally besieges the Man by degrees, and proceeds regularly, both as to the time of its coming, and as to the duration of the Fit, and afflicts him more violently than at first.

I will treat of this Disease first as it proceeds regularly, and afterwards of its irregular and uncertain *Phænomena*, when being forced out of its Course, either by a preposterous use of Medicines, that were improper, or by the Weakness of the Subject, it cannot attain to its proper and genuine Symptoms; therefore when the Gout is regular, it seizes the Sick most commonly in the following manner. About the end of *January* or the beginning of *February* it comes suddenly, and most commonly without giving any notice, only the Patient has been troubled with Indigestion, and Crudities of the Stomach some Weeks before; moreover the Body has been oppressed and pushed up with Wind, which daily encreases, till the Fit thunders upon him; but a few days before it comes, the Thighs are as it were benumbed, and there is as it were a Descent of Wind through the Flesh of

them, with convulsive Motions, and the Day before the Fit the Appetite is sharp, but not natural. He goes to Bed and sleeps well, but about two a Clock in the Morning is waked by the Pain, seizing either his great Toe, the Heel, the Calf of the Leg, or the Ankle; this Pain is like that of dislocated Bones, with the Sense as it were of Water almost cold, poured upon the Membranes of the parts affected, presently shivering and shaking follow, with a feverish Disposition; the Pain is first gentle, but increases by degrees; (and in like manner the shivering and shaking go off) and that hourly, till towards Night it comes to its height, accommodating it self neatly, according to the Variety of the Bones of the *Tarsus* and *Metatarsus*, whose Ligaments it seizes, sometimes resembling a violent stretching or tearing of those Ligaments, sometimes the gnawing of a Dog, and sometimes a weight; moreover, the part affected has such a quick and exquisite Pain, that it is not able to bear the weight of the Cloaths upon it, nor hard walking in the Chamber; and the Night is not passed over in Pain, upon this Account only, but also by reason of the restless turning of the Part hither and thither, and the continual Change of its place. Nor is the tossing of the whole Body, which always accompanies the Fit, but especially at its coming, less than the continual Agitation and Pain of the tormented Member; There are a thousand fruitless Endeavours used to ease the Pain, by changing the place continually, whereon the Body and the affected Members lie, yet there is no ease to be had, till two or three a Clock in the Morning, *viz.* (a Night and a Day being spent from the first approach of the Fit) at which time the Sick has suddenly ease, by reason there is a little Digestion of the peccant Matter, and some Discussion of it, though he undeservedly attributes it to that Position of the affected part he used last. And now being in a breathing Sweat, he falls asleep; when he wakes he finds the Pain much abated, and the Part affected swell'd afresh; for before there was only (which is usual in the Fits of those that have the Gout) visible, a swelling of the Veins intermixed with the affected Members. The next day, and perhaps two or three after, if the Matter apt to generate the Gout is copious, the part affected

ed will be in pain, which will be violent too towards Evening, but it will be eased about the time of the Cock-crowing; within a few days the other Foot will be in pain, as the former was; and if the former has leif off aking, the Weakness which rendered it infirm, will presently vanish, Strength and perfect Health being so presently restored, as if it never had been out of order; if the Pain is violent in the Foot lately seized. And yet it aff; the same Tragedy in the other Foot, as it did in the former, both as to the greatness of the Pain, and the duration of it, and sometimes on the first day of the Disease, when the peccant Matter is so exuberant, that one Foot is not able to contain it, it affi; both together with the like violence; but most commonly it seizes by turns one after another as we said. After it has vexed the Feet, the Fits that follow are irregular, both as to the time of their coming on, and duration; yet the Pain always returns in the Evening, and is not so great in the Morning; and of a Series of these small Fits consists that which we call a Fit of the Gout, longer or shorter according to the Age of the Patient; for it is not to be supposed, that when any one is afflicted with this Disease two or three Months, that it is one Fit, but rather a Series or Chain of small Fits, whereof the latter is more gentle, and of shorter duration than the former, till at length the peccant Matter being wholly consumed, the Patient recovers his former Health; which in those that are vigorous, and in others, whom the Gout has rarely visited, comes to pass often in fourteen Days; and in those that have been often afflicted by it in two Months; but in those who are more weakned, either by the long Continuance of the Disease, or by Age, it does not go off till Summer coming pretty well on, drives it away. The first fourteen Days the Urine is of a high Colour, which after separation puts off a red Sediment, and as it were full of small Sand; nor does the Sick render by Urine more than a third part of what he drinks, and the Belly is most commonly bound the said first Days; want of Appetite, shaking of the whole Body towards Evening, Heaviness, and a troublesome Uneasiness of the Parts that are not affected, accompanies the whole Fit; a violent itching of the Foot affected, follows the Fit that

is going off, chiefly betwixt the Toes, and the Feet scale as if the Sick had taken-Poyson. The Disease being discussed, a good Habit of Body and Appetite return, according to the Degree of Pain with which the Fit last past rag'd; and so proportionably the following will be hastened or retarded; for if the last Fit was very severe, the following will not come till the same time of the Year return again.

And in this manner, the regular Gout shews it self with its genuine and proper *Phænomena*; but when it is disturbed by unfit Methods of Cure, or by the obstinate Continuance of the Disease; the very Substance of the Body being as it were perverted to the Nourishment of the Disease, and Nature not being able to thrust out the same by her wonted Method, then the *Phænomena* differ much from those described. For whereas the Pain was hitherto only troublesome to the Feet (which are the genuine Seat of the peccant Matter, and if it possesses any other part, it is without doubt, that either the Method of the Disease has been altered, or the Vigour of the Body, is by little and little diminished), now it possesses the Hands, Wrists, the Arms, the Knees, and other Regions, tormenting these, as much as it used to do the Feet: For sometimes distorting one or more of the Fingers, it makes them like a Bunch of Parsnips, taking away the Motion by little and little, and at length it produces stony Contractions about the Ligaments of the Joynts, which destroying the Cuticle, and the very Skin of the Joynts being rendred visible, naked Stones, like unto Chalk or Crabs-eyes appear, which may be picked out by a Needle. Sometimes the Matter causing the Disease being thrust upon the Arm, causeth a whitish Swelling, almost as big as an Egg; which is by degrees inflamed with redness; sometimes falling upon the Thigh, it feels as if there were a great Weight hanging upon it; yet without any considerable Pain, but passing to the Knee, it handles that more severely, so obstructing all Motions, that it is as if it were nailed to the Bed: So that it cannot be moved a Hair-breadth from the place where it is. And because of the Restlessness of the Body, or to ease Nature, the Patient must be moved by the help of others, there is great care required, lest by chance, the least contrariety

trariety of motion, should occasion Pain, which for this reason only is tolerable, *viz.* because it presently goes off: And truly, this carrying of the Body, that must be perform'd so tenderly and carefully, is not a small part of the Troubles wherewith the Gout is burthened; for the Pain is not violent through all the Fit, if the part affected be kept quiet.

Whereas the Gout before did not use to invade, before the latter End of winter, and was wont to go off after two or three Months, now it remains upon the Sick a whole Year, excepting only two or three hot Months of Summer. And what is moreover to be observed, as the great and general Fit is longer than heretofore it was, so those particular Fits, whereof the general is composed, rage longer; for whereas before those particular Fits did not torment the Patient above a Day or Two, now where-ever it fixes, especially if it possesses the Feet and Knees, it does not go off till the tenth or fourteenth Day; moreover the first or second Day after its coming, the Patient feels some Sickness, besides the Pain, together with a total Prostration of the Appetite.

Lastly, Before the Disease was grown to such a height, the Patient did not only enjoy large Intervals of the Fits, but also during that Intermision, he was well in his Limbs, and in other parts of the Body, all the natural Faculties performing their Offices duly; but now his Limbs are contracted and cumbred, so that tho' he can stand, and perhaps go a little, yet he creeps along so very lamely and troublesomely, that when he walks he seems to stand still; and if he endeavour to walk beyond his strength, that he may the better recover his Feet, the more he confirms them by walking, and renders them less apt to receive the Pain, so much the more the Fomes of the Disease not perfectly dissipated by all this Interval, hovers more dangerously about the Bowels, when it cannot be so freely discharged upon the Feet, which at this time of the Disease, are scarce ever free from Pain, but are always uneasy more or less.

The Sick is also afflicted with many other Symptoms as with a Pain of the Hemorrhoidal Veins, with unsavoury Belchings, resembling the taste of the Meat last eat, putre-

putrefying in the Stomach, when something of hard Digestion is eaten, or only so much as is fit for People in health, the Appetite Languishes, and likewise the whole Body, by reason of a scarcity of Spirits. Lastly, he lives only to be wretched and Miserable, and not at all to taste of the Happiness of Life. The Urine that was before high coloured, especially in the Fits, and rendred in a small quantity, now is like that, both as to colour and quantity, which is voided in a *Diabetes*: The Back and other parts itch troublesomely about Bed-time.

And this inconvenience also happens in this Disease, when it is confirmed, viz. that upon yawning, especially in the Morning, the Ligaments of the Bones of the *Metatarsus*, are violently pull'd, and seem to be strongly pressed with a strong hand; and sometimes when yawning does not go before, the Patient just dropping asleep, suddenly feels a blow as it were of a Club, breaking in pieces the *Metatarsus*, so that he wakes crying out: The Tendons of the Muscles that sustain the Legs, are sometimes taken with such a sharp and vehement Convulsion, that the Pain which it occasions, if it should last but a little while, would overcome all humane Patience. After many and dreadful Torments, and long Execution, the following Fits as to Pain are gentler, as a pledge of the discharge which approaching Death is about to give. (Nature being partly oppressed by the burthen of the peccant Matter, and partly by old Age, is no more able to expel it constantly and forceably to the Extremities of the Body) but instead of the accustomed Pain, a certain Sickness with a Pain of the Belly, spontaneous Weariness, and sometimes a propension to a Looseness supervene. These Symptoms ease the Pain of the Limbs when they are violent, and likewise vanish when the Pains in the Joynts return; and sometimes the Pain, and sometimes the Sickness afflicting alternately, prolong the Fits much. For it is to be observed, that when any one has had the Gout many years, the Pain is by degrees lessened every Fit, and at length he dies more of the Sickness than the Pain: For the Pain which is in these Fits, tho' it is longer; yet it is not the tenth of that which he used to suffer when his Strength was more intire. But this severity of the Disease is compensated most commonly by the longer

longer space betwixt the Fits, and by the good Health he in the mean time enjoys. For in this Disease Pain is Nature's most bitter Medicine; and the more violent it is, the sooner will the Fit pass over, and the intermission will be longer and more perfect, and so on the contrary.

Nor does the Pain, the Lameness, and the obstructed Motion of the affected Parts, the Sickness, and other Symptoms described, compleat the Tragedy of this Disease: For it breeds the Stone in the Kidneys in very many, either because the Sick lies a long while upon his Back, or because the Organs of Secretion have left off to perform their due Functions, or because the Stone is made of a part of the same kind of Matter, but which is the Cause I shall not determine: whatever is the Origin of this Disease, the Patient has sometimes many sad Contemplations, to know whether the Stone or the Gout is most severe; and sometimes the Stone hindring the passage of the Water into the Bladder, through the Urinary Passages, kills him, not waiting longer upon the slow Gouty Execution. Nor is it enough, that the Sick is tormented in such a miserable manner, as that he cannot help himself; but wants the help of others: But this is also added to the heap of his Sorrows, *viz.* that during the Fit, his Mind is as it were affected with the Contagion, and so far suffers with the Body, that it is hard to say, which of them is most afflicted; for every Fit may be as properly called a Fit of Anger, as of the Gout; for the Mind and Reason are so extremely enervated by the infirm Body, that they are disordered by the least Motion of the Affections, so that he is as troublesome to others as to himself: Moreover, he is as obnoxious to the rest of the Passions, *viz.* to Fear, Care, and other of the same kind, by which he is also vexed, till the Disease going off, the Mind also has recovered its former Tranquillity.

At length (that I may dispatch the Catastrophe of this dreadful Disease) the Bowels being so hurt by hatching, and embracing the peccant Matter, that the Organs of Secretion can no longer perform their Duty, the Blood stuffed with Dregs stagnates, and the peccant Matter is not as heretofore cast upon the extrem parts of the Bo-

dy; at length, I say, the most miserable wretch is so happy as to die. But (which may be a comfort to me and others, that are afflicted with this Disease, though we are but moderately furnished with Money, and the Graces of the Mind) so lived, and so died, great Kings and Potentates, Generals of Armies, and Admirals of Fleets, Philosophers; and many others such as these. To be short, this Disease of the Joynts (which can scarce be said of any other) kills more Rich than Poor, more Wise than Fools, Nature demonstrating as it were with the Finger, how just the Creator and disposer of all things is, and how little he sides with Parties; for those that want something, are wont to be abundantly replenished with another kind of Good; and he allays profuse Munificence, by mixing an equal share of miseries with it; so that it is every where inviolably decreed, that no Man shall be perfectly happy, or altogether Miserable, but that all shall partake of both Lots, which mixture of Good and Ill, so convenient to our Frailty, and Mortality, is perhaps very proper for us.

Women are very seldom afflicted with the Gout, and if they are, not until they are old, or of a Masculine Habit of Body. Thin Women, who in their Youth or middle Age are troubled with Symptoms like the Gout, receive them from Hysterick Diseases, or a Rheumatism which they were troubled with heretofore, the Fumes whereof was not well carried off at the beginning.

Non have I hitherto observed, that Boys, or Youths, are vex'd with the true and genuine Gout; yet some that I have known, have perceived some small touches of it, before they have arrived to that Age, viz. when their Fathers had this Disease when they begat them. And here ends the History of this Disease.

Having very much considered the various Phenomena of this Disease, I suppose it is produced by the Concoction weakened, both in the Parts, and in all the Juices of the Body; for in those who are obnoxious to this Disease, they being either worn out by Age, or having, by Intemperance hastened old Age, the Animal Spirits are decayed throughout the whole Body, being consumed by the immoderate use of the vigorous Functions in the heat

heat of Youth, for instance, by too early or too much use of Venery; by mad and extravagant Exercises, whereby they unweariedly serve their Pleasures; to which is to be added a sudden intermission, or Cessation from the Exercises of the Body, to which they have been accustomed heretofore, either by reason of years, or Laziness, (by the use whereof the Blood is wont to be rendered more vigorous, and the Tone of the parts more firm) upon which account the Body becomes now withered, and the Concoctions are no more rightly performed; but on the contrary, the Dregs of the Juices of the Body are henceforth laid up in the Vessels, as a Stock for the Disease, which were discharged before by the help of such Exercises, and sometimes hard Study, or Meditation concerning some serious Matter had encreased the Disease, the fine and volatile Spirits being thereby diverted from their business of Concoction, which they ought to perform. Moreover, they that are subject to this Disease are not only most commonly greedy of Meats in general, but chiefly of those that are hardest to digest, of which, when they eat as much as they are wont to do, when they Exercised themselves, they are unable to digest them; nor does the said Voracity or full Feedings so frequently, (tho' it does often) occasion the Gout, as the immoderate and mad drinking of Wine, whereby the Ferments appointed for various Concoctions are wholly destroyed, and the Concoctions themselves, and the natural Spirits are vanquished, and dispersed by the great quantity of Adventitious Vapours. But when at one and the same time, the vigour of the Spirits, that are the Instruments of Concoction, are lessened, and also a great heap of Humours oppresses the Blood, it is impossible that all the Concoctions should be duly performed, when all the *Viscera* are so overwhelmed, upon which account the Spirits long ago weakened, are now suffocated; For if this were occasioned only by a weakness of the Spirits, Women and Children, and those which long Sickness has wasted, should likewise be seized by it; whereas for the most part it invades the strongest, and those that have the most robust Principles of Nature: Yet it does not seize them till Humours are heaped up, by reason of the defect, and Declination of the natural Spirits.

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by which joyned together the vitiated Concoctions are perverted.

Moreover, as every one of the Causes we have mentioned, promote Indigaaion, so most of them occasion a Looseness of the Habit and Muscles of the Body, by which means a passage is opened for the receiving crude and indigested Humours, as often as they are protruded to the outward parts, and when lying long in the Blood, they encrease in bulk, and contract an ill Disposition, and at length acquire a putrefying heat, and can no longer be governed by Nature, they break out into a Species, and fall upon the Joynts, and by heat and sharpness produce most exquisite Pains in the Ligaments, and Membranes covering the Bones, which being either weakned and loosened by Age, or by Luxury or Intemperance, make room for them, when they make an attempt; but this falling of the Humours that generates the Gout, which constitutes the Fit, happens sooner or later, as occasion is offered for putting these Humours into Motion.

As to the Cure (I will first mention those things that are to be omitted) tho', if we respect the Humours and the indigestion whereby they are occasioned, it may seem at first, that the curative Indications are chiefly to be directed, for the Evacuation of the Humours already made, and for strengthening the Concoctions; so that the heaping up of other Humours may be prevented, for as much as these are the more general Indications, whereby we should do the business in most other humoral Diseases; but in the Gout there is a sort of Prerogative in Nature, for exterminating the peccant Matter after its own way, by putting it off upon the Joynts, and by dissolving it by insensible Transpiration.

There are about three ways proposed, whereby we may eject the containing cause of the Gout: *viz.* Bleeding, Purging, and Sweating; and yet neither of these methods will ever perform the Business.

First, tho' Bleeding may seem both to evacuate those Humours that are just ready for a Descent, and also those that have already besieged the Joynts, yet it plainly opposes that Indication, which the Antecedent cause, that is Indigaaion, arising from a Depravation and Defect

fect of the Spirits, (which Bleeding lessens and oppresses more) requires, and therefore is not to be used ; either to prevent the Fit which is feared, nor to mitigate that which is now present ; namely, in those that are old ; for tho' that Blood that is drawn out, is most commonly like that of *Pleuriticks*, and of those that have a Rheumatism, yet bleeding does as much hurt to those afflicted with this Disease, as it does good in the two just mentioned : For if Blood is extracted in the Intermission, tho' a good while after the Fit, there is Danger, lest by the Agitation of the Blood and Humours, a new Fit should be caused more lasting than the former, and attended with more violent Symptoms, the Strength and Vigour of the Blood being blunted thereby, by the help of which the Nourishment of the Disease should have been diligently and constantly expelled.

And this Inconvenience happens as often, as bleeding is us'd at the beginning of the Fit ; and if it be used presently after the Fit, there is great danger lest Nature, the Blood having not yet recovered its former strength, weakened by the Disease, should be so much dejected by this unseasonably used, that a Dropsy should be caused thereby. But if the Patient is yet young, and has been over-heated by hard drinking, Blood may be drawn at the beginning of the Fit ; but if in the following Fits it is continually used, the Gout is soon confirmed even in Youth, and will more propagate its Tyranny in a few Years, than otherwise in a great many.

And then as to purging, whether upward or downward, this must be noted, that whereas by the inviolable Law of Nature annexed to the very Essence of this Disease, the Fomes of it ought always to be expelled to the Joints ; *Emetick* or *Cathartick* Medicines will do nothing else but recall into the Blood the peccant Matter, which was put off by Nature upon the Extremities of the Body ; upon which account, that which ought to be cast upon the Joints, rushes perhaps upon some of the *Viscera*, and so the Life of the Patient is in hazard, when before it was in no danger at all. Which is often observed, to be fatal to those who have been accustomed to purging Medicines, that they might prevent the Gout, (or which is worse) to lessen the Fit : For when Nature

is put by her usual method, whereby as being best and more secure, she drives the *Morbifick* Matter upon the Joints, and the Humours are turned inward upon the Intestines, and instead of Pain in the Joints, where there is none at all, or certainly but very little, the poor Wretches are almost destroyed by Stomach-sickness, Gripes and Faintings, and with a great Troop of irregular Symptoms.

Therefore I am fully persuaded, having learnt by continual, and repeated Experience, that all purging, whether by gentle or strong Medicines, such as are usually design'd for purging the Joints, do much hurt, whether it is used in the Fit, to lessen the peccant Matter, or at the end, to dissipate the Relicks of the Disease, or in a perfect Intermission, or good Health, to hinder the approaching Fit. For I have found at my own Peril, as well as of others, that purging Medicines used at any of these times, have been so far from doing good, that they have hastened the Mischiefe they should have prevented. First, therefore purging when the Fit rages, disturbing Nature when she is busied in separating the *Morbifick* Matter, and in putting it off upon the Joints, sometimes causes a great Confusion of the Spirits, so that the Fit is not only increased thereby, but the Patient's Life is also not a little indanger'd; and then *Catharticks* used at the end of the Fit, instead of removing the Relicks of the Disease, bring on another Fit afresh, as bad as the former, and thus the Sick being vainly deceived, contrive Misery for themselves, which they had not felt, if the Humours had not been enraged again: Which Inconvenience I have often found, having preposterously crav'd for Medical Help, to expel as I thought the Relicks of the Disease. Lastly, as to purging to be repeated at certain Intervals, and in perfect Health to prevent the Fit; tho', which must be confess'd, there is not so much danger of a new Fit, as in the Case just mentioned, when the Patient was not wholly freed, yet at this time it occasions a Fit, for the reason above-mention'd; and if by chance the Sick is not presently seized, yet it does not at all free him from the Disease, though he takes this or that Purge constantly at due distances, for I have known some subject to this Disease, who have not purged only at Spring and Autumn, but

but also monthly and weekly, that they might recover their Health, and yet none of these have escaped the Gout, for most commonly it handled them more cruelly afterwards, and with worse Symptoms than if they had not taken Physick at all. For tho' the said purging might take away some part of the containing Cause, yet no way conducing to the strengthening of Concoction (so far from it, that it weakens the same, and wounds Nature afresh) it opposes only one Cause, and so is totally unable to cure the Disease.

But this must be noted moreover, that from the same Defect of Spirits, whereby the Concoctions are vitiated, in those who are accustomed to have the Gout, the Frame of the same animal Spirits is render'd less firm and vigorous, so that it is presently disturbed by any Cause, whereby the Mind or Body is violently moved, and so very fleeting and shattered is it, as it happens to those that are subject to Hysterical and Hypochondriacal Diseases. From which Inclination of the Spirits to be disturbed, it happens that the Gout most commonly follows the least Evacuation. The Tone of the Body being dissolv'd, which the firmness of the Spirits, whilst they continue brisk, keeps compact and vigorous, the peccant matter moves without resistance; and by this Injury to the Body a Fit is presently produced.

But how pernicious soever this Method is, yet some Quacks are esteem'd for it, by cunningly concealing the purging Medicine they use; for it must be noted, that during the purging, the Patient has little or no Pain at all; and if purging cou'd be continued many Days, and no new Fit supervene, the Sick would presently recover of that he has now upon him; but truly he will be dreadfully punish'd afterwards, by the Confusion into which the said Agitation of the Humours has precipitated Nature.

Lastly, the Evacuation of the peccant Matter by Sweat, tho' it does less hurt than the above-mention'd Evacuation, yet it evidently appears to be injurious, for tho' it do not draw back the Fomes of the Disease into the Bowels, but on the contrary, drives it into the habit of the Body; yet for these Reasons it does hurt. First indeed, because when the Fit is off, it forces the Humours

yet crude and not prepared for Separation, upon the Limbs, by which means it brings the Fit before its time, and contrary to Nature's Consent; and then, because the forcing of Sweat in the Fit, does cast the peccant Matter too violently upon the affected Member, it produces at the same time an intolerable Pain; and if the quantity of the *Morbifick* Matter is greater than can be contained in the affected Part, it forces it presently upon other Members, and for this reason there is a great Ebullition of Blood and other Humours; and if the Body abounds very much with serous Matter, fit to produce the Gour, there is danger lest an Apoplexy should be occasion'd. Wherefore in this, as well as in all others, wherein Sweat is provoked by Art, to cast forth the *Morbifick* Matter, and does not come naturally, it is very dangerous to force it out too violently, and beyond that degree of Concoction, whereunto the Humours to be evacuated have come of their own accord. And that excellent Aphorism of *Hippocrates*, That things concocted, not crude, are to be medicated, is of as great use in provoking Sweat, as in purging the Belly, which is very evident in that Sweat that uses to come at the latter end of Agues, which if it is moderate and agreeable to the concocted quantity of *Febrile* Matter of the preceding Fit, much relieves the Sick: But if it is forced beyond Nature's bounds, by keeping the Sick continually a-bed, a continual Fever is caused, and instead of extinguishing the former Fire, a new one is kindled. In like manner in the Gour, the gentle breathing Sweat, which most commonly comes in the Morning of its own accord after each of the small Fits, whereof, as I have said, the great Fit consists, mitigates both the Pain and Restlessness, where-with the Sick has wrestled all the Night. But on the contrary; when at any time, this gentle breathing Sweat, that naturally soon goes off, is provoked longer and more violently, than the Proportion of the peccant Matter requires, which was concocted by the last Fit, the Disease is increased thereby. Therefore in this Disease, and in all others I ever saw, except the Plague only, it is not so much the Physician's, as Nature's Business, to force Sweat, because we cannot know by any means what part of Matter is already prepared for such a Separation,

paration, and by consequence what Measures we are to take for provoking it.

Now seeing it evidently appears from what has been said, that it is not only in vain to endeavour the cure of the Gout, by evacuating Remedies, but that they are also hurtful to gouty People, it remains that we enquire to what other end the curative Indications are to be directed.

Indeed I having exactly weighed, and carefully examined the foresaid *Phænomena*, gather from thence, that we must have respect to two Causes chiefly in the Cure of this Disease; the first is, the antecedent Cause, or the Indigestion of the Humours, arising from the defect of Heat, and the natural Spirits; the other is the containing Cause, or the Heat and boyling of these Humours, when they are corrupted and grown sharp by continuing too long in the Body, which their Delay is occasion'd by the Indigestion above-mentioned; these Causes are so absolutely contrary to one another, that those Remedies that do good for this, are injurious for the other; for which reason this Disease is so very difficultly cured; for while we endeavour to remove Indigestion by hot Medicines, there is danger lest on the other hand, we increase the Heat of the Humours; and when on the contrary, we would mitigate the hot and acrid Humours, either by cooling Remedies, or Diet, we occasion Indigestion, the natural Heat being weakened. But here by the containing Cause, I do not only mean that which actually besieging the Joints, forms the Fit, but that moreover which lurking in Blood is yet unfit for Separation; for all the *Morbifick* Matter is very seldom so clearly cast out, how long and severe soever the Fit has been, as that there are no Relicks of it in the Body after the Fit is gone off, and therefore regard must be had to this Cause, as well when the Fit is off, as when it rages; but for as much as the ejection of the containing Matter is wholly Nature's business, it must be done by her Method alone; for nothing can be in the mean time attempted to assuage the hot and acrid Humours without injury to the Digestions, only the Sick must forbear hot Medicines and Diet, whereby the Humours are inflamed; so that undoubtedly the greatest and chiefest intention of curing consists, in helping Concoction by removing Indigestions,

whereof I will now treat ; yet so as that in the Series of my Discourse, I may touch on those Remedies occasionally, which conduce to the asswaging of the Heat, and Sharpness of the Humours.

Therefore whatever assists Nature in duly performing her Offices, either by strengthening the Stomach, that it may concoct the Nourishment well, or the Blood, that it may assimilate the Chyle brought into it, or by strengthening the solid parts, that they may the better convert the Juices design'd for their Nourishment, and increase into their proper Substance. Lastly, whatever preserves the Organs of Excretion, and the Emunctories of the Body in such a state, as that the Feculencies of each part may in due time and order be carried off. These, and all things of this kind further the fulfilling this Intention, are properly called Digestives, whether they are Medicines, or rule of Diet, or Exercise, or any other of those things which are called the six Non-naturals.

These kind of Medicines in general are those which moderately heat, and are bitter, or gently bite the Tongue, for they are very agreeable to the Stomach, they purify the Blood, and comfort the other parts. For Instance, they are such as these, Roots of *Angelica*, *Elicampane*, the Leaves of *Wormwood*, the lesser *Centauri*, *Germander*, *Ground-pine*, and the like. Also those that are vulgarly called *Anti-Scorbuticks* may be added, as the Roots of *Horse-Radish*, the Leaves of *Garden Scurvy-Grass*, *Water-Cresses*, and the like. But yet these acrid and pungent Herbs, how pleasingly soever they be to the Stomach, and how much soever they help Concoction, are to be used more sparingly than others that corroborate the Stomach by their gentle Heat and Bitterness, and render the Mass of Blood more brisk and lively ; for they stir up the Fomes of the Disease, that has been long formed, and increase the Heat.

Some Species of them neatly mixed are better in my Opinion to concoct the Humours, than any one Simple of their Tribe. For tho' when we have need of the Specifick Virtue of any Medicine, that Rule holds good, The simpler it is, the better it is ; but when we design to cure the Sick by satisfying this or that Indication, every

every Ingredient contributes somewhat for the cure of the Disease ; and in this case the greater the number of Simples is, the more powerfully does the Remedy work, therefore various Forms of Medicines tending to this end may be neatly framed of the foresaid, and of the rest of the *Materia Medica* of this sort. I prefer an Electuary before the rest made like Venice-Treacle, as the most excellent, for that a mutual Fermentation of the Simples augments the Virtue of them all, as if it produced some third thing, which in the things joined has greater Virtue than any one of them in the same quantity. But I willingly leave the choice of such Ingredients, and the Forms wherein they are to be given, to the discreet Physician ; for I never thought it my Business to write Receipts, as they call them, but rather to note the indications, according to which the Methods of Cure are to be directed ; and this not being well minded, is the Cause why *Empericks* boast, that they are the chief of the Medical Art.

But for the Advantage of Beginners, I will set down the Remedy I am wont to use, which is compounded after this manner.

Take of the Roots of *Angelica*, of the sweet-smelling *Flag*, of *Master-wort*, *Elecampane*, of the Leaves of common *Wormwood*, of the lesser *Centaur*, of white *Horehound*, of *Germander*, of *Groundpine*, of *Scordium*, of common *Calaminth*, *Feverfew*, of *Field Saxifrage*, *St. John's-wort*, *Golden-rod*, *Thyme*, *Mint*, *Sage*, *Rhue*, *Carduus Benedictus*, *Penny-royal*, *Southern-wood*, of the Flowers of *Camomile*, *Tansy*, *Lilly of the Valleys*, *Englisk Saffron*, of the Seeds of *Treacle-Mustard*, *Garden-Scurvy-Grass*, *Caramays*, *Juniper-Berries*, each a sufficient quantity ; let the Herbs and Flowers, and Roots, be gathered when they have most virtue in them ; let them be dried and kept in Paper-bags till they may be finely powdered ; to six Ounces of each well mixed add a sufficient quantity of purified Honey, and Canary Wine to make an Electuary ; take two Drams Morning and Evening ; or for want of this, use the following.

Take of the Conserve of Garden-Scurvy-Grass, one Ounce and an half, of Roman Wormwood, and of the yellow Rind of Oranges, each one Ounce, of Candied Angelica, of Nutmegs candied, each half an Ounce, of Venice-Treacle three Drams, of compound Powder of Wake-Robin two Drams; make an Electuary with a sufficient quantity of Syrup of Oranges; let him take two Drams twice a day, drinking upon it five or six Spoonfuls of the following Water.

Take of the Roots of Horse-Radish sliced three Ounces, of Garden-Scurvy-Grass twelve handfuls, of Water-Cresses, and Brook-lime, of Sage and Mint, each four handfuls, The Peels of six Oranges, two Nutmegs bruised, of Brunswick Mum twelve Pints: distill them in a common Still, and draw only six Pints of Water for use.

Among the Medicines commonly known, *Venice-Treacle* is the best to corroborate the Concoctions; but because it contains a great many Species, that heat too much, and besides a great quantity of *Opium*, the Electuary above-mentioned, may be more commodiously prepared of the chief heating, and strengthening Vegetables; But we must take care to choose such Simples, as are pleasant to the Taste, for the Sick must take it a long while, *viz.* almost as long as he lives, and therefore it is very requisite that they should be palatable; among the Simples, the *Peruvian Bark* is the best, for it strengthens the Blood, and renders it vigorous, if some Grains of it are taken Morning and Evening.

And truly as in this Disease we now treat of, so in most other Chronical Diseases, these and such like Remedies, that strengthen the Blood, and render it brisk (if their Heat do not consist of Vinous Spirits, for reasons to be shewn hereafter) do most good, for as much as every Disease of this kind, if I conjecture right, ought to be referred to one and the same Cause, to wit, the Indigestion of the Humours,

But it can no way be made more evident, and better proved, than by setting in view the difference that is betwixt Chronical and Acute Diseases; whereof I hope
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the Reader will not take it amiss, if I digress a little from the business in hand. As therefore those for the most part are accounted acute Diseases, which either soon kill, or are brought to Concoction, so those are Chronical Diseases, which either are not concocted at all, or require a long time for their Concoction. And indeed the very Nature of the thing, as well as the Words by which it is expressed, plainly signifies as much: But the Cause of Difference which is perceived betwixt these two kinds of Diseases, is more obscure, and not easily to be cleared.

I suppose it will be worth our Labour, to spend a little time in the search after it; for the clear and distinct knowledge of these things, contributes much towards the finding out true and agreeable Indications for the cure of these Diseases.

Whether the innermost Bowels of the Earth, if it is proper to say so, undergo various Changes, upon which account the Air is infected by Vapours exhaling from thence, which seems very probable to me; or whether the whole *Atmosphere* is infected by an Alteration occasioned by a certain Conjunction of Heavenly Bodies: It is most certain that for a space of time, the Air is stuffed with Particles, which are hurtful to the Oeconomy of the humane Bodies; and that at another time it is impregnated with such Particles, as are Enemies to the Bodies of some Species of Beasts. When at these times we breath into the naked Blood, the noxious Venom, that is an Enemy to Nature, and fall into such Epidemick Diseases, which that is apt to produce; Nature procures a Fever, its usual Engine, to free the Blood from any disagreeable Matter that lodges within, and such Diseases are commonly accounted Epidemick, and are therefore acute and short, because they have so quick and violent a Motion; but besides, these Diseases occasion'd by an external Cause, there are other as acute proceeding from this or that peculiar Inflammation of the Blood, which do not depend on any general Cause, from the Air, but on a particular Irregularity, or Intemperies of particular Bodies, which sort of Fevers I call intercurrent, and *Sporodick*, which happen almost in all Years.

But Chronical Diseases have quite another Genius, for tho'

tho' an unhealthy Air, of this, or that kind may conduce much to the generating these Diseases, yet they do not so immediately take their Rise from the Air, but most commonly from the Indigestion of the Humours, the common Parent of them all ; for when any one has the Principles of his Nature weakned, and worn out either by old Age, or by great and continual Errors in the fix Non-naturals, especially in Meat and Drink, or if the Organs of Secretion have been so weakened, that they are wholly unable to purifie the Blood, and to carry off its Superfluities ; in these Cases a greater stock of Humours being heap'd up, than a Man's Strength is able to digest, the said Humours by continuance undergo various Fermentations, and Putrefactions, and at length break out in Specie, and occasion various kinds of Diseases, according to the variety of Depravation, and as these depraved Juices have various Dispositions, so they variously fall on this or that part, which is fittest to receive them : and at length by degrees they shew their long Train of Symptoms, which are wont to arise partly from the nature of such Juices, and partly from the Confusion brought on those parts, which two join'd together constitute the Irregularity of Nature, which is marked with the Name of some Disease.

Now it will plainly appear, that such an Impotency of Nature, for the concocting of Humours, is the principal Cause of Chronical Diseases, if we consider, that old Men whose Concoctions are weakened, and the Spirits, the Instruments of them, wasted by the repeated Functions of a long Life, are more inclined to these Diseases than younger People ; whose Flame of Life being more kindled, scatters those Feculencies heap'd up, and whose Organs of Secretion are constantly assisted by the natural Heat, that they may not be deficient in putrefying the Mass of Blood, unless they are oppressed, and as it were suffocated by too great a quantity of Humours. Moreover that such an Indigestion of Humours is the Cause of most Chronick Diseases, is manifest from hence, viz. because Winter is more apt to breed such Diseases than Summer ; tho' some of them do not actually come out till the latter end of Winter, yet the Stock of Humours on which they depend increasing all the Winter, is enlarged

ed by that cold and raw Season, debilitating Nature, so that she is not so able to preserve the Oeconomy of the Body. Upon which account it happens, that they who are very well in Summer, seldom escape those Diseases in Winter, whereunto they are most inclined. For instance, the Gout or *Asthma*, and a Cough, and the like. And from hence we may learn the reason, why travelling into more Southerly Regions, does so effectually conquer those Diseases, the Cure whereof is attempted in vain, in colder Climates. The truth of what I have said already concerning the general Cause of Chronical Diseases, will moreover manifest it self by the great and incredible relief which those that are afflicted with most Chronical Diseases, especially with a Consumption, receive by riding on Horseback, which kind of Exercise invigorates and strengthens all the Digestions, the natural Heat being revived by the continual shaking of the Body, and the Organs destined for Secretion, assisted in duly performing their Office of purifying the Blood, so that a renovation of the spoiled Digestions must necessarily follow, and by consequence, the best constitution of the Body.

Wherefore it is manifest enough, by the Reasons already alledged, that not only in the Gout, but also in other Chronical Diseases, where no manifest Symptom contra-indicates; such kind of hot Herbs are very beneficial, for they procure the Heat of Summer in the midst of Winter; tho' if we accustom our selves to the use of them in Summer-time, they will the better prevent those Diseases, which the contrary Season is wont to produce: And truly if they are deferred till Winter approaches, at which time a great deal of Matter is heap'd up, it is to be feared we fly too late to this refuge. But tho' (as I have discoursed largely before) the Gout by a peculiar Disposition is made worse by *Catharticks*; yet in most other Chronical Diseases, bleeding repeated as often as there is occasion, and purging is to be order'd, before these digesting and corroborating Medicines are to be used; but when the Patient has once entred upon the use of these, he must go on without purging betwixt whiles; for this must be constantly maintained, that as often as the Cure of any Disease is assay'd by corroborating

ting Medicines, all Evacuations are wholly injurious.

Lastly, I do not affirm, that these digestive Remedies now mentioned, are better than all others ; but this I say, that he that can find out the best Remedy to answer this Intention, will do much more in curing Chronical Diseases, than he would think he was able to do.

But this must be first taken notice of, and chiefly observed above all things, I am about to mention concerning the cure of the Gout, namely, that all digestive Remedies whatsoever, whether Courses of Physick, or Diet, or Exercise, are not to be taken up by the bye, but must be used constantly, and daily with the greatest diligence ; for whereas in this Disease, as almost in all other Chronical Diseases, the Cause of it hath passed into an Habit, and is become as it were a new Nature : No Man in his right Senses can think that some small and short Alteration, super-induced upon the Blood and Humours, by any sort of Remedy or Diet, can perfect the Cure ; for the whole habit of the Body must be changed, and the whole Man must be as it were new framed ; for it is not so here, as in some acute Diseases, where he that even now was strong, and in perfect Health, is suddenly seized with a Fever, and precipitated from the best state of Health into the most dangerous Disease. No, the Case of the Gout is quite different, where he that for many Years together, by indulging himself in Surfeiting and Drunkenness, and neglecting his wonted Exercises, is worn out by Sloth and Negligence, or by hard Study, or continual and intense Thinking, or by some other Errors of Life ; as if he had designedly perverted the various Ferments of the Body, and oppressed the Animal Spirits (which are the chief Instruments of Digestion) by which means the Preter-natural Humours that are heap'd up, break out at length, when they are arrived to the highest degree, and confound all, the Flesh being softened, and the Joints weakened ; so that they readily receive the Humours falling upon them. And so at length another Nature is as it were super-induced by degrees, the pristine and natural Oeconomy of the Body being wholly subverted, and destroyed : And those Fits about which unwary and unthinking Men are so buſied,

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are indeed nothing else, but the Series and Order of Symptoms depending on that Method, which Nature is wont to use in driving out the Matter that causes the Disease; wherefore he labours in vain, that endeavours to drive away this Disease, by this or that Remedy, or *Regimen*, now and then used. For this Habit being chiefly founded, and consisting both in the Weakness of all the Digestions, and in the want of the natural Strength of the particular Parts, we must provide against both these Ills, and the Strength of the Concoction, as well as the Soundness of the Parts, must be reduced and restored gradually to the former State, and Oeconomy of the Body, tho' to perform this fully and perfectly, may not seem possible, not only because any Habit is difficultly changed into the quite contrary, but also because old Age, which most commonly attends this Disease, violently opposes; yet the Cure is to be endeavoured, as much as the Strength and Age will permit: And the nearer or further from this Mark the Patient is, he will more or less avoid the Tyranny of the Gout.

And it is moreover to be observed, that digestive Remedies, either Medical or *Dietetick*, are chiefly to be used in the intervals of the Fits, and as long as may be before the next Fit; for by reason of Old-age, much time is requir'd, and a constant use of Medicines, before the Corroboration of all the Concoctions, and the Restauration of the enfeebled Ferments of the Body, and such a Soundness as is requisite for the Blood and *Viscera* can be obtained.

But tho' those Remedies, and other things of the like Nature, may do good, yet this intention of corroborating cannot be answer'd by these things alone, but Respect must be also had to these things, which do not properly belong to Physick. And he will be most certainly deceived, that thinks he can perform the Cure of this or some other Chronical Disease by Medicines alone: First therefore, a Mediocrity is to be observed in Meat and Drink, so that neither more Nourishment be taken in, than the Stomach can decoct, lest the Disease should be heightened by it; nor on the other hand, must the Parts, by too much Abstinence, be defrauded of that Proportion, whereby the Strength and Vigour ought to be

be sustained, for by doing so, they will be more weakened ; for either is alike hurtful, as I have frequently found in my self and others. Moreover as to the Quality of the Meat, the things of easie Digestion considered by themselves, are to be preferred before things of hard Digestion ; yet regard must be had to the Patient's Palate. For we must take notice, that that which is earnestly craved for by the Stomach, though of difficult Digestion, is sooner conquered by Nature, than that which is accounted to be of easier Digestion, if it be offensive to the Stomach : But those things that are reckoned of hard Digestion, are therefore to be eaten more sparingly ; and I suppose the Patient ought to feed upon one sort of Meat at a Meal ; for various kinds of Flesh eaten at once, disturb the Stomach more than one sort eaten in the same quantity ; as to other things besides Flesh, let him eat at pleasure, if they are not sharp, nor salted, nor spiced ; which though they do not injure Concoction, yet they are hurtful, for that they exagitate the Fomes of the Disease.

As to the Times of eating, a Dinner is only necessary, for the Bed being most convenient to digest the Humours, that time ought not to be wasted about concocting the Meat ; therefore they that are subject to the Gout, should not eat Suppers, yet they may allow themselves a large draught of Small-beer, for such are also most commonly inclinable to breed the Stone in the Kidneys, the Concretion whereof is much hinder'd by such a kind of Liquor, drank at this time, the Reins being cleansed and cooled thereby.

The drinking of Milk, or a Milk-Diet, either crude or boiled, without any thing else, except perhaps a piece of Bread with it once a day, has been much used these twenty Years, and it has done more good to many, than any other kind of Remedy for this Disease, as long as they kept exactly to it : But so soon as they returned to common Diet, tho' of easie Digestion, the Gout returned more violently than before, and kept them longer ; for the Principles of Nature being weakened by this Method, the Sick was rendered less capable to repel the Disease, for which cause it was more dangerous, and lasted longer, therefore he that designs to betake himself to this Method,

Method, ought first to consider seriously, whether he can continue in the use of it all his Life long, which perhaps is not in his Power, how resolute soever he may be. For I knew a Noble-man, who after he had been dieted with Milk only, a whole Year with Pleasure, (all which time he went to Stool daily once, or oftner) was forced to leave off, because he was suddenly bound in Body, and the Temper of his Body altered, and because at length his Stomach nauseated Milk, tho' the Inclination of his Mind still continued. But some *Hypochondriacal* People of a gross habit of Body, or who have accustomed themselves much and a long while to spirituous Liquors, can by no means bear a Milk-diet. Moreover, that very short and fading benefit that they receive by this Diet, to whom Milk is agreeable, proceeds hence, *viz.* not only, for that this Diet is most simple, (for I do not doubt, but that Barley-broath may do as well, if the Stomach will bear it) but also because it renders the Blood more sweet and mild by quelling the acrid Particles in it; and moreover, which I suppose is most considerable, Milk being a sort of Food very unfit for grown People, suppresses that Turgesency of the Humours, which occasions the Gout; and for that reason those few with whom a Milk-diet agrees, are so long free from the Gout, as they feed upon it, and no longer; for by being wholly unsuitable to the original Cause of the Gout, *viz.* the Weakness of the Ferments and Concoctions, it is much more injurious than beneficial. And because this has not been sufficiently regarded, some unwary People have fell into great and fatal Errors; for by endeavouring to oppose the containing Cause, *viz.* the Heat and Sharpness of the Humours, they have destroyed the Concoctions, and all the natural Functions.

As to Liquors, those in my Opinion are best, that are neither as strong as Wine, nor as weak as Water, of which sort is our *London* Small-beer, with or without Hops, for extremes on either hand are hurtful. First as to the Wine, tho' the Proverb says, Drink Wine and have the Gout, and drink no Wine and have the Gout. Yet it is without Controversy, and confirmed by various Experiments of gouty People, that Wine *de facto* is injurious. For tho' it may be supposed to do good by helping the Concoctions

Excessions, the Disorders whereof, I have long accounted the antecedent Cause of the Gout; yet with respect to the containing Cause, it must be reckon'd wholly injurious, for that it fires and exagitates the Humours, the Fomes of the Disease, already prepared to give battle; yet I do not grant that Wine used for ordinary drink, does promote Concoction; but rather spoils it, unless in those that have been accustomed to Wine for a long time; for tho' as it passes by it imparts some Heat, yet it certainly injures the Ferments of the Body, and destroys the natural Spirits; and for this reason I suppose great Drinkers die of the Gout, Dropsy, Palsy, and other cold Diseases. Moreover, a continual swilling of Wine renders the Bodies soft like the Bodies of Women, whereas temperate Liquors strengthen and confirm the Tone of all the Parts; for which reason, they that have always used small Liquors, seldom know what the Gout means. It is moreover to be noted, that those Men are most inclinable to this Disease, who tho' their natural Concoction is lessen'd, are nourished more than enough, by reason of a certain Luxury of the Blood, and they grow bulky by reason of some indigested Matter, instead of good Substance and well compacted. And drinking of Wine does more increase this Luxury of the Blood; and moreover, heaps up a new stock of Matter, and actually occasions the Disease, by firing as it were the Fomes of it, which has been laid up a long while. And besides, the Blood of Gouty People, being very like that which is taken from those that are *Pleuriticks*, or seized with some other inflammatory Disease; it would be a mad thing to enrage it more with spirituous Liquors. Nor on the contrary, are too cooling Liquors to be used; for these by quite spoiling the Concoctions, and extinguishing the natural Heat, produce the greater mischief; not Pain, as Wine doth, but Death it self: As Experience teaches in those, who freely indulging themselves in drinking Wine, till they are old, and breaking themselves suddenly to drink small Liquors, have soon destroy'd themselves.

Therefore those that are subject to the Gout, must take care that they use those Liquors, that can neither cause Drunkenness when they are taken in a large quantity, nor injure the Stomach by chilling it; of this kind, as I said,

said, is our Small-beer, and a proper Liquor may be made in other Countries, by mixing a little Wine with a great deal of Water. I count Water by it self, crude and injurious, and I have found it so to my hurt. But Water may be safely drunk by young Poople, wherewith at this day, the greatest part of mankind quenches Thirst, being more happy with their Povertry, than we with Plenty and Luxury. To confirm which, I produce that great Trains of Diseases, whereby our Bodies on this account are tormented, *viz.* the Gout, Stone, Apoplexy, Palsie, and the like; and that violence upon the Mind, whereby it's driven contrary to its native Rectitude, while the adventitious Spirits of such Liquors, complicated with the Animal Spirits, serving for the forming Thoughts, disturb the Mind, by volatizing it too much, suggesting vain and frivolous Fancies, instead of things that are solid, and of some moment, and so makes us Jestors, and Merry-fellows, instead of Wise Men, between which the difference is almost the same, as betwixt a Substance and a Shadow: But enough of this.

But now tho' it may be sufficient for him that has the Gout but a little, and at some times only, to use Small-beer, and diluted Wine, the degree of this Disease, not requiring a more severe usage; yet when the whole Substance of the Body is as it were degenerated into the Gout, he will be unable to conquer the Disease, who does not wholly abstain from any sort of fermented Liquors, tho' small and mild; for all these contain a pungent Spirit, and some degree of sharpness, and what is worse, as they have a Ferment in them (even as Yeast put into Liquors, imparts a Fermentative Virtue to the whole Mass) so they incline the Humours to a perpetual Fermentation.

Therefore a *Dietetick* drink must be prescribed of the Ingredients commonly known, and appointed for this use for ordinary drink, if it be not too strong; for if so, the Humours will be almost as much enraged as by Wine: And, on the contrary, it must not be so small, as to hurt the natural Functions, by over-cooling them. This sort of Drink, if it be made of such Ingredients as are least displeasing to the Patient, tho'

the constant taking of them, may cause some loathing for a Week or two, will afterwards be as pleasing, and as acceptable, as any other Liquors, to which he has been most accustomed. And by this kind of Liquor, the Appetite will be increased, and become more natural than it used to be with fermented Liquors. And moreover there will be this advantage, that he that uses this *Dieterick* Liquor for his ordinary drink, may the freer indulge himself in other Diet, than when he drunk Beer or Wine; for the Errors in Diet (all which it is almost impossible for a Man to avoid) will by this means, be somewhat corrected and amended. But, which is the chiefest of all, the Patient may prevent the Stone by this means, which is commonly the constant Companion of the Gout; for all sharp and attenuating Liquors, occasion a Fit of the Stone, as well as generate it. The following Liquor, being of a pleasant Taste and Colour, pleases me best.

Take of Sarsaparilla six Ounces, of Sassafras, China, and shavings of Harts-horn, each two Ounces, of Liquorice one Ounce; boyl them in two Gallons of Fountain-water for half an hour; afterwards let them stand covered upon hot ashes twelve hours, afterwards boyl it to the Consumption of a third part; as soon as it is taken from the Fire, infuse half an Ounce of Aniseeds; after two hours strain it, and let it stand till its clear; keep the clear infusion in Glass Bottles well stopp'd for use.

This Liquor is most conveniently used at first when the Patient recovers of the Fit, and he must persevere in the use of it all the rest of his Life, as well when he has the Fits, as at other times. For it is not enough to study new things, when the Disease is raging; for in such a Confusion, and disorderly Motion, Nature can scarce bear the change of fermented Liquors, which are brisk and spirituous, for such as are small and without Spirits. At the same time the above-mentioned Electuary must be used daily, as well in the Fits, as when they are off; the heat of this will somewhat allay the waterishness of the *Dieterick* Drink, affording a due degree of heat to the

the Blood and Bowels, without that agitation which used to be occasioned by the heat of fermented Liquors.

If any one should object, that that Life is scarce vital, wherein a total Abstinence from Wine and other fermented Liquors is observed : I answer, it must be considered, whether it be not much more miserable, and less tolerable, to be racked and dreadfully tortured with the Gout, grown strong by continuance (for when the Disease is gentle, this is not requisite) than to be confined to this Liquor ; the use of which being continued, he may indulge himself in almost all sorts of Food : Not to repeat now, that this Drink (as well as all other things) grows pleasant by Custom. Certainly he that has felt this Disease, if he be a Man, will not long dispute which is best.

Yet notwithstanding, if the Patient by reason of a long, and too great use of intoxicating Liquors, or by reason of old age or weakness, cannot concoct his Meat without Wine, or some other fermented Liquor, he cannot leave it off suddenly without great danger, the doing whereof has been fatal to many. Therefore in my opinion he should not use the *Dietetick* Apozem above described ; but if he be resolved to use it, let him be accustomed to it leisurely (drinking a draught of Wine at Meals for some time) more like a Remedy than a Diet, till the Decoction becomes more familiar : But *Spanish* Wine is to be preferred in this Case before *French* or *Rhenish* Wine, the two last being apt to intrude the Humours, and to increase the Fomes of the Disease, tho' they are very grateful to the Stomach. Moreover, they are almost as crude, and scarce more concocted than our Syder, and besides they are not so Cordial and hot as the Case requires. And so much may suffice for the Meat and Drink of gouty People.

There is another thing tho' it may seem small, yet is of great moment, as well for digesting the Fomes of the Disease, when the Fit is violent, as for hindring the Generation of the Matter, when the Fit is off ; to wit, that the Patient especially in Winter go to Bed early ; for besides, bleeding and purging, nothing destroys the strength of Nature more than watching a Nights, which every sickly Person can affirm by Experience, if he con-

siders how much brisker, and more chearfully he rises, when he goes to Bed early, and how languid and faint, he is when he sate up late ; and tho' it may seem as well, if he lies a Bed so many hours, whether he goes to Bed sooner or later : For instance, whether he goes to Bed at Nine, and rises at Five, or goes to Bed at Eleven, and rises at Seven ; yet it is not so, and I suppose chiefly for this reason, *viz.* in the Day-time the Spirits are dissipated, either by the Exercise of the Body or Mind, which in People that are sickly are so infirm and weak, that they have need of Rest earlier in the Evening ; for the approach of Night causing as it were a Relaxation of the Oeconomy of the Body, which was kept up in the Day-time, by the influence of the Sun, it is necessary that the heat of the Bed should supply the want of the Sun, especially in Winter. But in the Morning, the Spirits being refreshed and invigorated by the Rest of the foregoing Night, and the warmth of the Bed besides, for that the ensuing day adds firmness and strength to the Tone of the Body, rising early at this time, tho' an hour or two is taken from the Morning sleep, Nature is not so much injured, as by Evening watchings protracted an hour or two. Wherefore I would perswade those that are subject to the Gout, to go to Bed early, especially in Winter, and to rise early, tho' sleep somewhat shorter may intice them to lie longer ; for sleeping in the Morning, prevents so much sleep the next Night, and so at length a force being brought upon Nature, and its wise Instructions despised, Night is turned into Day, and Day into Night.

Moreover, the tranquility of mind must be by all means obtained ; for all Perturbations, when they break the bounds, mightily dissolve the Frame of the Spirits, that are the instruments of Digestion ; and so by consequence much promote the Gout. Therefore the Sick should prudently consider his own mortal Condition, and not foolishly imagine that he is freed from those troubles, that necessarily follow it ; for whether he suffers this Affliction of mind, either by his own fault, or the fault of others, he can never prescribe Laws to the World, which has not been always hitherto obedient to any one, how Potent and Wise soever he has been ; nor does ever
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all things fall out so exactly, according to any ones mind, as he fondly imagines, but suddenly as he is busied in mind about the ordering of things, he becomes the Specimen of humane frailty, having unreasonably deprived himself of the Enjoyment of the fading Fruits of Life. The same inconvenience follows too great an Application of mind to study, and serious things; for Melancholy always attending this Disease, more than any other, those that are subject to it, are wont to tire and overwhelm the Animal Spirits, by thinking much and long, without the Artificial help of Books; and they do so mightily over-think, that the Oeconomy of the Body, cannot longer preserve it self whole: For which reason in my Opinion, this Disease seizes (except my self if you please) very few Fools.

But the Exercise of the Body is more advantageous, than all other things that are used, to hinder the Indigestion of the Humours, (which I reckon the chief cause of the Gout) and to corroborate the Blood, and to restore strength to the parts: But it must be observed, which I have mentioned above, that as in this Disease, more than in any other chronical Disease, the Habit of the whole Body ought to be changed; the Exercise of the Body, unless it is daily, will do no good; for this kind of Exercise intermitted by Turns, as it does scarce conduce any thing to the change of the habit of the Body grown languid and effeminate, by Sloth and Indulgence, so perhaps it may prove injurious, by occasioning the Fit, when the Patient has dis-used it a long while. But this Exercise ought not to be violent, but such as is agreeable to Old-men, which are most usually the Subjects of the Gout. For too violent a Motion of the Body does too much dissipate the Spirits, and by consequence hurts the Concoctions, whereas constant and moderate Exercise strengthens them. Tho' this may seem hard to a Man, who besides Old-age and Sloth, and the unsuitness of the Body for Motion, which is as it were natural in this Disease, is moreover punished with Pain; and yet if this be omitted, nothing which has been already found out will do any good, and as the intervals of the Fits without constant Exercise of the Body, will not be long, so such an one will be more prone to breed

the Stone which is more dangerous, and more tormenting than the Gout.

Moreover (which is of great moment) the Stony matter is much increased, by long rest in the Joynts of the Body, especially of the Fingers, so that at length they are wholly deprived of all Motion. For how confidently soever some People affirm, that the Matter of these Stones is nothing else but the *Tartar* of the Blood put off upon the Joynts, yet it will easily appear to any one that does a little weigh the thing more seriously, that when a great quantity of unconcocted Matter, causing the Gout, flows upon some of the Joynts, and renders the neighbouring parts tumid a long while, at last it happens, that partly by reason the Assimulative Virtue of these is choaked, and partly by reason of a suffocating Obstruction, which this dull Humour breeds in them, the said Matter is generated, which is turned into this kind of Substance, by the heat and pain of the Joynts, and is daily increased, changing the flesh and skin into its own Nature, which now lies naked, and may be picked out with a Needle, and is like Chalk, or Crabs-eyes, or some such thing. But now this ill may be prevented by daily Exercise, by which the Humours causing the Gout, which are apt to seize on one part, are duly scattered through the whole Body. So that it comes to pass as I have observed my self, that long and daily Exercise does not only hinder the Generation of this very Matter; but also dissolves the Stones when they are hard and old, if they have not prevailed so far, as to change the outward skin into their own Substance.

As to the kind of Exercise, riding on Horse-back, when Old-age, or the Stone does not hinder, is much to be preferred before the rest: And truly, I have many times thought with my self, that if any one knew a Medicine which he could also conceal, as effectual in this, and most Chronical Diseases, as constant and daily riding on Horse-back, he might easily get a vast Estate. If this cannot be used, riding in a Coach does almost as well; and on this account at least it is well with gouty People, for their Riches which enticed them in Luxury, whereby the Disease was bred, can provide them a Coach, which kind of Exercise they may use, when they cannot the other.

But

But it is to be observed, that it is best to use Exercise in a good Air, *viz.* in the Country, and not in a City, where the Air is filled with Vapours exhaling from the Shops of various Artificers, and thickened by the Closeness of the Buildings, as it is here in *London*, which is generally thought to be the most spacious City in the whole World. But how great the difference is betwixt the Exercises in the Country, and Exercises in Town, any one that has the Gout will soon find.

As to Venery, he that is old and gouty (being now destitute of a stock of Spirits, whereby the Concoctions ought to be promoted, and by consequence his Joynts, and the neighbouring parts to them, too much weakened and loosened without this adventitious Destruction) is equally as improvident. In my Opinion, if he indulge himself in these Allurements, as he that having undertaken a Journey, should consume all his Provisions before he sets out; for besides, the Mischief he brings on himself, by not restraining the impotent Desires of feeble Age, he deprives himself of the great Priviledge of enjoying that Jubilee which is reserved as the great and special Favour of Nature for old Men only, whereby in the last Scene of their Lives, they are at length emancipated from the impetuosities of Lust, which like a ravenous Beast worried them all the time of their Youth, Night and Day: For the full satisfaction of these Appetites can no way compensate for that long Train of Miseries, that either accompany or follow it. And so much for the *Regimen*.

But tho' Rules of this kind respecting Diet, and the other *Regimen*, if they are carefully observed by those that are subject to the Gout, may preserve them from violent Fits of it, and may restore that strength to the Blood and solid parts, whereby they may be freed from the many Miseries, on which Account this Disease exceeds humane Patience, and at length becomes mortal; yet after some Intervals, especially at the latter end of Winter, they will be sometime seized with the Gout: For tho' in Summer time, when the Tone and Vigour of the Blood is excited and preserved in its State by the heat of the Sun, and there is likewise a due Elimination of the Humours through the Pores, it is reasonable to

suppose, that the Concoctions should proceed much better than in Winter; yet when Winter approaches, the strength of the Blood being lessened, and the Perspiration through the Pores hindered, there must needs be a great heap of indigested Matter, which by its long continuance, will form a Species accompanied with proper Symptoms, and produce a Fit, as soon as occasion is offered, either by the Humours put into motion by the nearer approach of the Sun, or by drinking Wine, or by violent Exercise, or by any other evident Cause.

It is manifest from what has been said, That he that endeavours to cure this Disease, ought to make it his business to change the Habit of his whole Body, and to restore its old Constitution, as much as Age, and other Circumstances will permit, which must be endeavoured in the spaces betwixt the Fits; not when the Fits are on, for when the Fomes is not only generated, but now is cast upon the Joynts, it is too late to strive to change it, or to cast it out any other way, for it is to be ejected by no other method than Nature shews, wherein alone we must acquiesce; which is observed in the Fits of Agues, and for which reason we do nothing till the Heat is over: Nor is he more absurd, that is anxiously busied about taking off the Heat, Thirst, and Restlessness, and other Symptoms of these Fevers, than he that thinks he has cured the Gout, when he has only laboured to restrain the Symptoms; for by this means he has only rendred the Cure of it more difficult; for the more he eases the Pain, the more he obstructs the Concoction of the Humours, and the more he takes off the Lameness, the more he hinders the Expulsion of the Morbifick Matter. Moreover, the more the Fury and the Sharpness of the Fit is suppressed, it will not only last longer, but the space betwixt the Fits will also be shorter, and less free from every degree of the Symptoms which accompany this Disease; which no one will deny, that has well considered what I have treated of above concerning the History of this Disease.

But now tho' no greater matter must be attempted during the Fit, only the removing those Symptoms, which a false method of Cure sometimes occasions, yet seeing all allow that this Disease proceeds from an abundance, and

and an Exuberancy of Humours, it may perhaps be convenient for the Patient to abstain from flesh for some days, when he is first seized, and in the place of it, to use simple Barley-broth, or some such kind of Food, which sort of thin Diet conduces much towards the lessening the *Morbifick* Matter, and will give Nature an opportunity to digest it sooner. But for as much as there is a vast difference betwixt the Body of one Person and another, some not bearing Abstinence from flesh, but by reason of it are seized with a Confusion of the Animal Spirits, with fainting and other Symptoms, which use to befall Women that are subject to Hysterical Fits, these People are injured if they forbear Flesh any longer than their Stomachs loath it, which seldom lasts beyond the first or second Day of the particular Fits, all which joyned together as I mentioned before, make a whole Fit; but whether any one eat Flesh sooner or later, great care must be taken, that they eat no more during the Fit, than is necessary to sustain Nature. Nor is less care to be taken about the quality of the Diet; for as in the Intervals of the Fits, so more especially when the Fit is present, the Sick ought to take the greatest care, that he do not at all err in the quantity, or quality of his Meat or Drink. And moreover, more than ordinary care must be taken in observing any other *Regimen*, as well as this in the Intervals; and tho' the Pain, as well as the unsuitness for Motion, may seem to contra-indicate Exercise, which I have commended above all other things, yet this labour must be undertaken. For tho' at the beginning of the Fit it may seem impossible, that the Sick should bear to be carried into a Coach, and to be sure he is much less able to bear the Motion of it; and yet if he try it, he will soon perceive that he is less pained by such a Motion, than when he keeps at home in his Chair. And moreover, he has this advantage, if he ride some hours in his Coach, in the Morning and after Dinner, that whereas when he sate at home all day, he lay awake the greatest part of the Night, now he can sleep away the Pain a great part of the Night; for very moderate Exercise does so weary a Gouty-man, that he falls asleep. And besides, the same Exercise does somewhat prevent the Stone, which an easie

Life

Life most commonly causes. But what is most considerable, the total impotence of the Limbs for Motion, is helped by constant Exercise, which happens to many after the first or second long Fit, the Tendons of the Hams and Heels being contracted; for when by reason of the tormenting Pain, they have allowed themselves to lie still a long time (being unwilling to extend their Legs, when the Pain has seized their Knees) at length they are deprived of the Motion of their Legs and Feet, all the rest of their Lives, as well when the Fits are off, as when they are on. Furthermore in old Men, whose Concoctions are much vitiated, and who by reason the Disease has afflicted them many years, have as it were the very Substance of their Bodies turned to the Gout, it is not to be hop'd that the Disease without Exercise, can ever be brought to Digestion; for when the Disease is too strong for Nature, they often die by Fainting and Sicknes, which the abundance of the Furniture for the Disease that cannot be concocted produces, and they are destroyed by this Matter, that cannot be concocted, as by Poyson.

But notwithstanding what has been said of the Usefulness of Exercise in the Fits of the Gout, yet if the Sick by reason of the violence of the Fit, is as it were overwhelmed presently by the first Assault of it, (which happens to those for the most part in whom the Gout has now come to its height, nor is it yet grown gentle by a Course of many years) in this Case, if the Sick is confined to his Chamber, it will also be convenient, that he keep his Bed for some of the first days, untill the violence of the Pain is abated, for the Bed does somewhat supply the want of Exercise; for the continual use of it does more powerfully digest the *Morbifick* Matter in a few days, than keeping up in many, especially at the beginning of the Disease, if the Sick can abstain from flesh without fainting, or other ill Symptoms, and be contented only with Barley-broth, Small-beer, and the like. But we must take notice, That if the Gout is inveterate, and inclines the Sick to Fainting, Gripes, a Looseness, and such kind of Symptoms, he will scarce avoid being destroyed by one of the Fits, if he do not use Exercise in a free and open Air: For a great many Gouty People have

have perished by these Symptoms, to whom they have been obnoxious by being confined to their Chambers, and especially to their Beds; whereas had they bore the Fatigue of riding in a Coach the greatest part of the Day, they had not died so soon. For tho' he that is troubled with Pain only in one of his Limbs, may confine himself to his Chamber, yet if another, that instead of violent Pain is afflicted with Sickness, and the other aforesaid Symptoms, should he do the same, would endanger his Life; and indeed it is well for the Sick when the Pain is so violent, that he cannot bear Motion, for then there is no great need of it, the very Pain which is the bitterest Remedy in Nature securing his Life.

But as to the Symptoms of the Gout, we must apply our selves to those whereby the Life of the Patient is endangered; the weakness and faintness of the Stomach, with Gripes of the Belly as from wind, is the most frequent of these which befalls those, who either have been subject to the Gout many years, or those, who tho' they have not been long afflicted with it, have notwithstanding invited this mischief too early, by suddenly changing spirituous for those that are thin, and much cooling, or by applying repelling Plasters, and other cooling Medicines to the parts affected, to assuage the Pain; upon which account the Material cause of the Disease, which ought to have been put off upon the Joynts, is cast upon the Bowels. I have tryed many things for the Fits of the last years to lessen this Symptom; but nothing did so much good as a small draught of Canary Wine taken now and then, when the Sickness and Faintness afflict the Sick: Nor is red French Wine, nor Venice Treacle, nor any other Cordial thing which I have yet known, so effectual. But we must imagine that neither this Wine, or any other Cordial, if Exercise be not used, can wholly preserve the Patient.

But if any one Symptom scarce bearing a Truce, comes suddenly by reason of the striking in of the gouty Matter, and threatens Death, we must not trust to the Wine, nor to the Exercise above commended; but in this Case if it does not fall upon the Head; but upon the natural or vital Parts, we must immediately fly to *Laudanum*, namely, give twenty drops of *Liquid Laudanum*,
mixed

mixed with a small draught of Epidemick-water, and let the Patient compose himself to rest in his Bed. But if the Matter occasioning the Gout produces a Loosness, because it is not yet cast upon the Limbs, if it be not the *Crisis* of a particular Fit, and if notwithstanding *Laudanum* above commended, and Exercise of all sorts, (for this must be first used for the Cure of the Loosness) the *Diarrhæa* continues, accompanied with Sickness and Gripes, there is only one Remedy, that I know, *viz.* to provoke Sweat, by a Method and Medicines designed for this use, which if it be performed for two or three days, Morning and Evening, for two or three hours at a time, it most commonly stops the *Diarrhæa*, and forces the Fomes of the Disease upon the Limbs. I cured my self by this method some years ago, after I had imprudently cast my self into this Disease, by drinking cold Water for my ordinary Drink, when I had used Cordial and astringent Medicines of various sorts in vain.

There is another Symptom not so frequent, though I have seen it divers times, *viz.* a Translation of the peccant Matter upon the Lobes of the Lungs, when a Winter Cough, by reason of cold taken in time of the Fit, has by degrees drawn the matter upon the Lungs, the Limbs in the mean time being wholly, or almost freed from the Pain and Swelling, by reason of the Translation of the peccant Matter upon another Region; in this one Case the Curative Indication is not to be directed to the Gout, but this Symptom is to be treated like a true *Peripneumonia*, *viz.* by bleeding repeated, and cooling and thickening Medicines, and Diet; for the Blood drawn in this Symptom especially, is like the Blood of *Pleuriticks* exactly. Moreover, the Sick must be purged betwixt the Bleedings, whereby the filth that is fallen upon the Lungs may be carried off. But Sweating how powerful soever it is in forcing the Fomes of the Disease upon the Limbs, does hurt in this Case, by hardening the Matter that is thrust upon the Lungs; upon which account small Abscesses are generated, and at length the Sick certainly dies.

Moreover it is to be noted, that almost all Gouty People, when they have conflicted a long time with this Disease, are subject to the Stone in the Kidneys; and that

that they are wont to be troubled with *Nephritick Pains*, either in the State, but most commonly at the Declination of a general Fit, which does not only torture him much, but also weakens him much, whereas he was but too much weakened, and worn out before. In this Case, setting aside all other Remedies, let him presently take a Gallon of Posset-drink, wherein two Ounces of the Roots of Marsh-mallows have been boyled, and let the following Glyster be injected.

Take of the Roots of Marsh-mallows, and Lillies, each one Ounce, of the leaves of Mallows, Pellitory of the Wall, Bears-breech, and of the Flowers of Camomile, each one handful, of Flax and Fenugreek-seeds, each half an Ounce; boyl them in a sufficient quantity of Water, to a Pint and a half; dissolve in the strained Liquor of brown Sugar, and Syrup of Marsh-mallows, each two Ounces, mingle them, make a Glyster: as soon as he has rendred all the Posset-drink by Vomiting, and has rejected the Glyster, let him take a large Dose of Liquid Laudanum, viz. twenty five drops, or fifteen Grains of Matthew's Pills.

If any one enquires for external Remedies to ease the Pain of the Gout, I hitherto know none, tho' I have tryed many in my self and others, excepting things cooling and repelling, the use whereof I have shewed above, is dangerous; and I confidently affirm, that the greatest part of those, who have perished in the Gout, have not been so properly killed by the Disease, as by an improper use of Medicines. But if any one will try the Virtue of external Medicines, which are certainly accounted *Anddynes*, do not let him impose upon himself by applying them at the Declination of a particular Fit; at which time the Pain is about to cease of it self; but rather let him use them at the beginning of the Fit, and then he will soon perceive, how fruitless they are; and how vain his hopes; for indeed these Epithems may do hurt sometimes, but they can never do any good; for which reason I have used no external Remedies many Years. The Pultis made with white Bread and Saffron boyled in Milk, a small quantity of Oyl of Roses being added

added, did heretofore do me more good than other things, and yet this signified nothing at the beginning of the Fit; therefore if the Pain be very violent, it will be better for the Sick to keep himself a Bed, till the Pain is abated, than to use external *Anodynes*. But it will not be amiss to take a little *Laudanum* in the Evening, if the Pain is intollerable, otherwise it will be better to omit it.

But now seeing I am speaking of external Remedies, I must say something of the Indian Moss, called *Moxa*, much esteemed of late for the Cure of the Gout, if it be burnt a little upon the part affected. Tho' this kind of Remedy is said to be received from the Oriental Indians, being before wholly unknown by the *Europeans*, yet it will appear to be known amongst us many Ages, to him that shall consult the Writings of *Hippocrates*, published above two thousand Years ago. He says in his excellent Treatise of Diseases, that if the Pain continues obstinate in any one part, and cannot be expelled by Medicine, in whatever part it is, you must burn it with crude Flax; and afterwards speaking of the Gout, he says the same things are good which are proper in the Diseases of the Joynts, and indeed this Disease is long and grievous, but not deadly: But if the Pain remains in the Fingers, burn the Veins in the Fingers above the Joynts with crude Flax. Now I suppose none will think that there is any Specifick difference betwixt the Flame of Flax, and of this Indian Moss, no more than he can suppose, that a Fire kindled with Pieces of Oak can do anything more than a Fire made of the Wood of the Ash-tree. This burning of the Part affected may be useful for mitigating the Pain, the most spirituous Part of the Morbick matter cast off upon the Joynts being drawn out by it: But the benefit obtained by this means, because it does not any way cure Indigestion, the antecedent cause of the Gout, must needs be very short and fading, and to be used only, when the Gout is beginning; for when the Gout, as it sometimes happens, is turned inward, either by its long continuance, or by an unseasonable, and undue Use of Medicines, and so affects the *Paucot* rather with Sicknes, Gripes, and a great many other Symptoms of this kind, than with Pain

Pain, I suppose no sober Man will think that Fire is to be used.

What I have said is all I know of the Cure of this Disease. If any one objects, that there are many Specifick remedies for the Gout, I freely confels I know none, and I fear those that promise so much are as ignorant as I am; and truly it is to be lamented, that the noble Art of Physick should be so crouded with these Trifles, which are imposed upon the credulous, either by the Ignorance and Falseness of Writers; for in almost every kind of Diseases, such kind of things are cried up, as if they were divine, by such as make a Trade of these Trifles; or which is more to be wondered at, this mad Humour does not only prevail in Diseases, that are indued with a Type, but in such also, as are not at all formed, and proceed from some hurt of the Organs, or from an external Occasion, and imposes upon Men, as to other things very prudent; and this appears from such things, as are commonly accounted Specificks for Contusions, such are *Sperma Ceti*, Irish Slate, and the like, all which do only divert the Method, whereby this Malady ought to be treated, as will be manifest to him, who shall try, how much safer and sooner it may be cured by Bleeding and Purging, used alternately, till the Sick is well, those Trifles being wholly neglected, which are customarily given after once Bleeding, and that Solicitation of Sweat, which is wont to proceed from the Use of them, by which heating of the Parts, before inclined to an Inflammation, the life of the Sick is indangered without any reason.

But if what I have proposed signifie nothing, and I seem not sagacious, and too sparing of Medicines, I will propose all that *Lucian* has proposed fully in his Tragedy of the Gout, from whence one may chuse Externals and Internals, and perhaps he will find them as effectual, as many of those things that are cried up by some. *Lucian* brings in the gouty Person speaking thus to those that boast, that they have some secret Remedies to cure this Disease.

*Quis invictam me Dominam dolorum
Ignorat podagram in terrâ mortaliū?*

Quam

Quam neque thuris vapor placat,
 Neque effusus sanguis aras ad incensas ; (nariis :
 Non templum divitiarum undique suspensis ornatum de-
 Quam neque Apollo medicamentis expugnare valet,
 Omnium medicus in cælo Deorum ;
 Non filius Apollinis doctissimus Æsculapius.
 Postquam enim enatum est primum hominum genus,
 Conantur omnes meam elidere potentiam,
 Miscentes semper medicamentorum artificia.
 Alius aliam in me experitur artem.
 Terunt plantagines, & apia mihi,
 Et folia Lactucarum ; & sylvestrem portulacam ;
 Alii Marrubium ; alii Potamogetonem ;
 Alii Urticas terunt ; alii Symphytum ;
 Alii Lentescunt ex palustribus lectas ;
 Alii Pastinacam coctam ; alii folia Persicorum,
 Hyoscyamum, papaver, cæpas agrestes, mali punici cortices,
 Psyllium, thus, radicem Ellebori, nitrum,
 Fœnum Græcum cum vino, Gyrinem, Collamaphacum,
 Cyperissinam Gallam, pollinem bordeacum,
 Brassicæ decoctæ folia, gypsum ex Garo,
 Stercora montanæ capræ, humanum oletum,
 Farinas fabarum, florum Asii lapidis ;
 Coquunt Rubetas, mures-areneos, lacertas, feles,
 Ranæ, Hyenas, Tragelaphos, Vulpeculas,
 Quale metallum non exploratum est mortalibus ?
 Quis non succus ? Qualis non arborum lachryma ?
 Animalium quorumvis ossa, nervi, pelles,
 Adeps, sanguis, medulla, stercus, lac.
 Bibunt alii numero quæternum pharmacum :
 Alii octono : sed septeno plures.
 Alius vero bibens hieram purgatur :
 Alius incantamentis impostorum deluditur :
 Judæus alium stultum excantat nactus :
 Alius vero remedium petit ab hirundinis nido.
 Ego autem his omnibus plorare impero,
 Et facientibus hæc atque irritantibus me
 Soleo occurrere multo iracundior.
 In vero qui cogitant nihil adversum mihi,
 Benignam adhibeo mentem, facilisque fio.

I do not at all doubt, but the most prudent of those who having a long while conflicted with this Disease, and wholly despairing of a Cure, will approve of the Chorus, that makes the Catastrophe of this Tragedy.

L Enem, Ô ubique gentium celebrata afferas (nobis) dolorem, ô podagra.

Levem, facilem, non acutum, brevem, haud sevientem, Tolerabilem, facile desinentem, parum validum, ambulationes non impedientem.

Multi sunt modi miserorum :

Sed exercitia dolorum, & consuetudo

Podagricos soletur.

Ideoque aequo animo, ô complices, obliviscimini

Dolorem. Si ea quæ placent non fiunt,

Tamen etiam præter spem accidentibus viam invenire

Solet Deus.

Quivis sustineat podagra laborantium

Deludi & derideri :

Talis enim hujus morbi natura est.

To conclude ; The Method which I here deliver is built upon a strict Examination of the foresaid Phenomena, and by following it, I have eased the Disease in my self and others, yet a perfect Cure, whereby a Man may be freed from a disposition to this Disease, yet lies hid, and I know not when, or by whom it will be brought to light; yet notwithstanding I hope that I have been some way beneficial to Mankind by this Treatise, by faithfully discovering those Rocks, whereon I and many others have been wrecked ; and moreover the best Method I have yet known, and I promise no more, tho' by my long Course of thinking, I am induced to believe that such a Remedy will be some time found out ; and if ever it happen to be, it will expose the Ignorance of the Dogmatical, and then it will appear, how much they are deceived in the knowledge of the Essences of Diseases, and in the Medicines they use for them ; a plain instance whereof we have in the Discovery of the Peruvian-bark, the best Specifick for Agues. For how many Ages were the Wits of the most diligent Men exercised in finding out the Cause of Agues, whereby eve-

ry one adapted a Practise best agreeing to the Theory he had framed : But how those ways of Cure were able to defend the Theorems is manifest from those things, whereof we have yet a fresh remembrance, in which, placing the various Species of Intermittents in the various Humours abounding in the Body, they were wont to direct the Method of Cure to the Alteration and Evacuation of these Humours : But how unsuccessfully they managed it, the ill Success of their Endeavours, but especially the happier Use of the Bark makes manifest, by the help whereof now, not regarding these Humours, nor Diet or *Regimen*, by only observing a due Method of giving the Bark, we do the business effectually, and scarce ever fail, unless the Sick be unnecessarily kept in Bed, whilst it is used. Yet so great is the Vertue of this Remedy, that notwithstanding this Inconvenience, *viz.* because the Fever is heightened by the heat of the Bed, the Sick is most commonly cured by it. In the mean while, till the perfect Cure of the Gout be found out, which all Physicians ought to desire, especially I, let this Treatise be kindly received as it is : But if it be otherwise, I so well understand the Humours of Men, that I shall not be much deceived, and I so well understand my Duty, that I shall not be discouraged ; and if the tormenting Pains, the unfittest for Motion, and the rest of the Diseases of the Body, wherewith I have been afflicted for the greatest part of my Life, together with the Loss I have sustained in my Business by Sicknes, can acquire ease for others, It shall receive, now I am passing into another World, some Fruit of the Miseries of this kind I have felt in this Life.

Of a D R O P S Y.

EVery Age of Man, and both Sexes, are sometimes afflicted with a Dropsy : But Women are more inclined to this Disease than Men : But it seizes these especially when they are in Years, and Women when they have done breeding. But it sometimes seizes barren Women when they are young ; the Pits by the impressi-

on of the Fingers in the Small of the Leg, that are especially conspicuous at Night, and that vanish in the Morning, are the first Signs of this Disease. But not so certain a Sign of an approaching Dropsy in Women, as in Men; for Women with Child, and such as have a stoppage of the Courses upon any account, are often so affected: Nor does such a Tumour in Men certainly indicate a Dropsy; for when an old Man, of a gross Habit of Body, has for several Years been troubled with an *Asthma*, and has been suddenly freed from it in the Winter, a great Swelling presently seizes the Legs, that resembles an Hydropick Swelling, which is more in Winter than in Summer, in a rainy Season, than in clear Weather, and yet he is accompanied with it as long as he lives, without any great Inconvenience. And yet notwithstanding, generally speaking, a Swelling of the Legs, is to be accounted a Sign of the supervening Dropsy in Men also, especially, if those so affected are short breasted, which Tumour increases daily in Bulk and Quantity, till the Legs containing no more Water, the Thighs are swelled, and afterwards the Belly, which being filled with *Serum*, continually put off by the Blood, distends it by degrees to its utmost Capacity, so that often it contains many Gallons of Water, which rushing upon the Navel, sometimes causes a Rupture there.

Three Symptoms accompany this Disease, difficulty of breathing, little Urine, and great Thirst; the difficulty of breathing rises from the Water oppressing the Diaphragm, upon which account the natural Motion of it is obstructed; the Urine is rendred sparingly, because the *Serum* of the Blood, which ought naturally to be voided by the Urinary Passages, is now put off upon the Cavity of the Belly, and upon other parts fit to receive it; the Thirst is occasion'd by the Putrefaction of the serous Humour, which, by long continuance in the Body, becomes acrid and hor; upon which account the Sick is always feverish and thirsty.

Proportionable to the Bulk of the Sick increased in the Parts, wherein the Disease is seated, he wastes daily more and more in other Parts; at length when the Quantity of the Water is so great, that it can no longer be contained within the Belly, it breaks out upon the vital and

noble Parts, and he is as it were drowned in a Deluge.

The Cause of this Disease is a Weakness of the Blood, by reason whereof, being now unable to turn the Aliment into its Substance, it necessarily casts it off upon the Extremities, and depending parts of the Body, and presently into the Belly also, wherein, as long as it is in a small Quantity, Nature frames some small Vesicles to contain it: But at length increasing above measure, it is included only by the *Peritonæum*.

The Blood is weakened most commonly by too great an Evacuation, either by Venesection, or by any other way, or by some long Disease, or by the destructive Custom of drinking spirituous Liquors immoderately, by which means the natural Ferments are destroyed, and the Spirits dissipated, and hence it is, that excessive Drinkers are oftentimes afflicted with this Disease, tho' it be a cold one; and also on the contrary, the drinking of Water in those who accustomed themselves to generous Liquors, injures the Blood as much.

But in Women, which is to be noted, another Cause of a Dropsy, very different from these, is to be found, viz. a heap of Matter or obstruction of one of the Testicles, which by degrees confounds the *Crasis* of it; upon which account, the Tunick of it is wonderfully stretched by the Fomes of the Disease, first repositied in the said Testicle, which being about to crack, Nature makes some Vesicles to receive the Humour: But at length one or more of them being broken, and exonerating themselves into the Cavity of the Belly, the same Symptoms occur, which we have described above in a Dropsy: But of this kind I have treated heretofore.

There are also two other Species of Swellings of the Belly, that resemble a Dropsy, both frequent in Women; the first is a preternatural Excrecence of Flesh in the Parts within the Belly, which makes it as bulky, as when Water is included in it; the other Species arises from Wind, which occasions not only a Tumour, but other Signs of breeding; this Widows are chiefly subject to, or Women that were not married till they were in Years, and these in their own Judgment, and in the Opinion of their Midwives, which they consult as their Oracles

Oracles in these matters, think they feel the Child move at the accustomed time, and so to the usual time of the Birth, and moreover they are sometimes sick, as breeding Women use to be; moreover their Breasts swell, and have Milk in them, so that they often provide Childbed-linnen; but at length their Bellies assuage by degrees, as they increased, and their Hopes fail them: But neither of these is to be referred to the Disease we are now speaking of.

The true and gentle curative Indications, as they naturally arise from the foresaid *Phænomena*, are wholly to be directed, either to the Evacuation of the Waters contained in the Belly and other Parts, or to strengthen the Blood to cut off the Spring of them.

As to the Evacuation of the Water; it is of great moment to observe diligently, that in Hydropical Persons, those Purges that work slowly, or not sufficiently, do more hurt than good; for all purging Medicines being inimical to Nature, upon which account they purge, somewhat weaken and hurt the Blood; wherefore unless they pass quickly, and are presently expelled by moving the Matter, which they cannot carry off with themselves, and by exagitating the Blood tumultuously, they increase the Tumour more, which appears plainly in their Legs, who are so gently purged; wherefore that purging may be used for the advantage of the Patient, you must know, whether he be easily or hardly purged; for on this depends all the business of the Cure, and accordingly it will be easy or very difficult.

Wherefore when you are to use *Hydragogues*, you must carefully respect the easiness or Difficulty of the Patient's purging, which can be certainly known no other way than by enquiring diligently how other purging Remedies, used at another time, operated; for in Bodies there is a certain *Idiosyncrasie*, as to purging easily or difficultly; and therefore he will endanger very often the Patient's Life, who makes the sensible Temperament of the Body his Rule in this Case; for it many times happens, that they that are of a strong Constitution are easily purged, whereas they that are of a quite contrary Constitution, are not easily purged with the strongest *Catharticks*; and indeed this Caution concerning the unaptness the Patient's Body to bear purging,

is not only to be minded in *Hydragogues*; but in all other sorts of Purges; for I have often observed an *Hypercatarrhis* occasioned by Lenitive Potions, when the Physician has not enquired as he ought, whether the Patient was easily or difficultly purged: But because a Dropsy, as I said before, above all other Diseases, requires the strongest and quickest Purges; and because in this Disease gentle purging, that may do good in some other Diseases, ought by no means to be admitted here; (for Purges of this kind do not only diminish the Swelling, but increase it;) for this reason, I say, strong and large purging is to be preferred before such as is weak, especially seeing we have *Laudanum* to stop it, if it should work too much.

Moreover, in all Purges used for the Cure of a Dropsy, this must carefully be noted, *viz.* that the Waters be evacuated as fast, as the Strength of the Sick will permit; for the Patient ought to be purged every Day, unless by reason of the Weakness of the Body, or the too violent operation of the preceding Purge, it ought to be omitted for a Day or two; for if purging be repeated only at great distances, tho' it purge much, we shall give occasion to the Waters to gather again, and by means of the Truce, being ignorant of the Victory gained almost, instead of being Conquerors, we shall be shamefully routed, and leave the business undone. Moreover there is danger lest the Water by its long continuance among the Bowels should putrify them; and besides, which is of no small moment, the Waters put into a Motion by the foregoing *Catharticks* are more inclined to injure the Body, than when they are quiet; wherefore for this reason as well as others before mentioned, we must answer this Intention which respects the Waters contained within as soon as may be; nor must we desist from it, or cease purging, unless necessity urge, till all the Water is evacuated.

This is moreover to be observed, which is plain from Practice, that almost all *Hydragogues* by a peculiar Genius of their own, if they are given by themselves to those that are difficultly purged, do not succeed well, and a large Dose of them rather promotes a Tumour in the Blood than Purges, so that the Tumour which

which ought to be lessened, is increased thereby, and therefore in such Bodies, they are usually mixed with things that purge gently, to quicken them; yet notwithstanding in those that are easily purged, *Hydragogues* work quickly, and with great Success.

Wherefore for those that are easily purged, Syrup of *Buck-thorn* alone purges Water plentifully, which Remedy indeed, purges in a manner only Water, and evacuates a great quantity of it, and does not disturb the Blood, nor render the Urine high coloured, as other Purges usually do, and this Syrup has but one ill Property, *viz.* that whilst it is working, it makes the Sick very thirsty. But if you give the greatest Dose of it to those that are difficultly purged, it will not give many Stools, nor bring away so much Water from them as it ought.

I remember very well, (for this was my first *Hydropick* Patient) Twenty seven Years ago, or thereabout, I was called to *Westminster*, to one Mrs. *Saltmarsh*, an honest and pious Gentlewoman, her Belly was incredibly big; I gave her an Ounce of the foresaid Syrup before Dinner, as the Custom was then; it can scarce be imagined how much Water she evacuated by Stool, and that without any Tumult, or Faintness, which so incouraged me, that I gave it daily, only when at any time she was weak, I omitted it for a Day or two, and so the Waters being gradually drained, the Belly daily asswaged, and she perfectly recovered, and I with the juvenile Confidence of an unexperienced Man verily believed, that I had got a Medicine that would cure any manner of Dropsy: But I found my Mistake within a few Weeks, for soon after I was called to another Woman that had the same Disease, that came upon a long Quartan Ague, I gave the same Syrup, and followed the Disease by the frequent repetition of it, and by increasing gradually the Dose. But having endeavoured in vain to evacuate the Waters, the Purge not working, the Tumour of the Belly increased, and the Sick dismissed me, and as I remember recovered by the Assistance of another Physician, who prescribed more effectual Remedies.

Wherefore when it is manifest, that the Sick is of such a Constitution, that gentle Purges will not do the business quickly, and easily, stronger must be used; in which

Case, as I hinted just now, it is to be noted, that tho' few *Hydragogues*, given by themselves, succeed, yet being mixed with *Lenitives* to quicken them, they are effectual enough in such kind of Bodies. For instance, I have frequently prescrib'd the following Potion with Success.

Take of Tamarinds half an Ounce, of the Leaves of Senna two Drams, of Rhubarb one Dram and an half; boil them in a sufficient quantity of Water, to three Ounces, in the strained Liquor dissolve of Manna, and Syrup of Roses Solutive, each one Ounce, of Syrup of Buck-thorn half an Ounce, of the Electuary of the Juice of Roses two Drams; mingle them and make a Potion.

But it must be given only to strong People. It purges when nothing else will, as I have found by much Experience. Or :

Take of White-wine four Ounces, of Falap finely powder'd one Dram, of Ginger powder'd half a Scruple, of Syrup of Buck-thorn one Ounce, mingle them, make a Potion to be taken early in the Morning, every Day, or every other Day, according to his Strength.

Another form of a Medicine that I frequently use follows, which they may conveniently use who nauseate the Repetition of other Purges, which heats the Patient in purging; and strengthens him. For instance :

Take of the Roots of Falap beaten, and Hermodactiles, each half an Ounce, of Crude Scammony three Drams, of the Leaves of Senna two Ounces, of Liquorish rasped, of the Seeds of Anise and Caraways, each half an Ounce; of the Tops of Wormwood, and the Leaves of Sage, each one handful; infuse them cold in three Pints of common Aqua Vitæ, strain it as you use it, let a Spoonful be taken at Bed-time, and two the next Morning, increasing or decreasing the Dose according to its Operations.

But

But two Medicines remain, which I count the best for those that are difficultly purged, and stronger than any I have mentioned above; I mean *Elaterium*, and the Infusion of *Crocus Metallorum*; *Elaterium*, or the *Fæcula* of the wild Cucumber works powerfully in a small quantity, and evacuates plentifully the *Fæces*, and watry Humours; two Grains of it, generally speaking, is a sufficient Dose for most Bodies; I use to mix them with one Scruple of the Pill *Ex duobus*, and so make three Pills to be taken in the Morning.

As to the Infusion of *Crocus Metallorum*, one Ounce and an half of it, or for such as are purged difficultly two Ounces, given in the Morning, and repeated daily according to the Strength of the Sick; tho' at first, it may seem only to evacuate the Water lodged in the Stomach, yet at length it will free the Belly from Water; for besides, that it usually works downwards, when the Vomiting ceases, it necessarily also, by the great Agitation, and Concussion of the Stomach, and Bowels encompassed round with Water, evacuates it, by Passages which are not very open: But if the foresaid Vomit does not sufficiently purge the lower Belly, I use to add, and sometimes tho' rarely, after the third or fourth Dose of the Infusion of *Crocus Metallorum* by it self, the Electuary of Roses, or the Syrup of *Buck-thorn*. For instance.

Take of the Water of Carduus Benedictus three Ounces, of the Infusion of Crocus Metallorum one Ounce and an half, of the Syrup of Buck-thorn half an Ounce, of the Electuary of the Juice of Roses two Drams, mingle them, make a Potion.

It is plain, that there are secret Passages, through which the Waters are carried from the Cavity of the Belly to the Intestines; for we daily observe, that *Hydragogues* evacuate such a great quantity of Water from the Belly by Stool, as if it were contained in the very Intestines. But because we cannot well solve, how it should be, I cannot but mention that famous Saying of the wisest and best Physician, according to the Opinion of all Ages, *viz. Hippocrates*, in his Book *De Prisca Medicina*; Some

Some Physicians and Sophisters, says he, say, That it is impossible to know the Art of Physick, unless you know what Man is, and how he was first made, and compacted; but I, says he, think, that those things that are said and written by some Sophisters and Physicians of Nature, more properly belong to the Art of Painting than to Physick.

But, (lest this Divine Author should be accounted erroneous, or *Empericks* should seek a Cloak for their own Ignorance from this place) I declare, That I, according to my best Thoughts about Practice, (which ought to be the Touch-stone of the Professors of Physick) suppose, that it is absolutely necessary, that a Physician should well understand the Structure of the human Body, that he may be the better able to conceive and form true Ideas of the Nature and Causes of some Diseases: For he that is ignorant of the Fabrick of the Reins, and of the Passages tending to the Bladder, cannot guess, whence those Symptoms arise, that proceed from the Stone in the *Pelvis*, or from being thrust deep into the *Ureters*. Chirurgions also ought to understand the Structure of the Humane Body, that in their Operations they may be the better able to abstain from those Vessels and Parts, which if they should be violated, would destroy the Patient; nor can they well reduce dislocated Bones to their natural places, unless they curiously inspect, and well understand the Frame of the Bones, called a *Skeleton*.

Therefore such a knowledge of the humane Body is absolutely necessary, and he that has it not, will, as they say, fence winking with some Diseases, or go to Sea without his Compass. Moreover this Knowledge is easily and soon acquir'd; for it may be shortned more than other things that are more difficult; for it may be learned by sight in human Bodies, or in some Animals, and that very easily by such as are not sharp-witted: But in acute Diseases, which kind contains more than two thirds of Diseases; and moreover, in most Chronical Diseases, it must be confessed there is some Specifick Propriety, which no Contemplation, reduced from the Speculation of the humane Body can ever discover; wherefore, that Men should not so place the main of the business

business upon the Dissection of Carcasses, as if thereby the Medical Art might be rather promoted, than by the diligent Observation of the Natural *Phænomena*, and of such things as do good and hurt, is I suppose what the Divine Old Man would have chiefly avoided in the aforesaid place, and that he does not banter and contemn the general Knowledge of the Fabrick of the humane Body.

And truly so great, and wise a Man must needs know that all the Discoveries that can be made, cannot exceed such a general Knowledge; for tho' by a diligent search in dissecting Bodies, the greater Organs, which Nature uses in performing her business, appear, and also some Vessels, through which the Juices are transmitted from these to other Parts: Yet what is the Original, and primary Cause of this Motion, the Eyes cannot see, nor can the best *Microscope* discover those small Passages through which the *Chyle*, for Example, is strained through the Intestines into the Chyliferous Vessels, or by what Passages the Blood passes through the Arteries into the Mouths of the Veins. Moreover, there are most innumerable and fined Pores and Passages in the wonderful Frame of Man, which none can so much as dream of, so rude and unlearned (pardon the Expression) is our Knowledge, and in a manner only conversant about the outside of things, and only rises to the *τὸ ἐν*, and to only understand things are so; but can by no means reach the Causes of things. However it be, we may without much difficulty understand as much as is sufficient, according as the Nature of the thing will allow, to direct us in the cure of those Diseases, which require, as we said above, such a Knowledge, so much especially as may force us to worship the Divine Artificer with the greatest Humility of Mind, while we contemplate his wonderful Workmanship in those things, which our Reason can discover to us, and that which is much more excellent in other things, which we can no way search into.

And as *Hippocrates* blames those who waste more time in studying Curiosities in Anatomy, than in practical Observations, and by Consequence of Nature it self: In like manner any prudent Man in this Age may blame those

those, that think the Art of Physick, can be no ways so well improved, as by new Chymical Inventions; for tho' we should be very ungrateful, if we should not freely acknowledge that help which we have received from Chymistry, it having supply'd us with some good Medicines, and such as are very fit to answer Indications, among which this very *Emerick*, of which we now treat, is not the least; wherefore the Art is very laudable, if it be restrained to the Bounds of Pharmacy: But they are to be blamed, who so heat and distract their Brains, that at length they think, the Art of Physick is chiefly deficient for want of great and effectual Remedies, that can only be prepared by the Chymists, whereas he that weighs the thing well, will find, that the chief defect of the Practice of Physick does not proceed from the want of means to answer this or that Intention, but because we do not know, what that Intention is, that is to be satisfied; whereas every Apothecaries Boy, in a quarter of an hours time can tell me, with what Medicine I shall Vomit, Purge, or Sweat, or how I shall cool one, that is hot: But he ought to be well skilled in the Practice of Physick, that can teach me as certainly, when this or that kind of Remedy is to be used, through the whole course of Diseases and Cures.

And truly I am very certain, that nothing can so much conduce to form the Judgment right in this matter, as an exact Observation of the natural *Phænomena* of Diseases, and likewise of those things, which are observed in Practice, from what does good or hurt, whether they are the Remedies used, or the Method, wherewith we endeavour to cure the Disease: If these things are diligently compared one with another, they will shew the Nature of the Disease, and moreover, from whence the curative Indications are to be taken, much better and more certainly, than if I should direct my Course to the Speculation of the Nature of this or that Principle of the concentered Body, as by the Stars; for the most exquisite Dissertations of this kind are nothing else than Metaphors neatly deduced and adorned, and which, like all other things, that are founded upon Imagination, not upon Nature it self, will vanish and be worn out by time, whereas the Judgments of Nature built

built upon the Verity of things will continue as long as Nature does.

But tho' *Hypotheses* built upon Philosophical Speculations are altogether vain ; because no Man is indued with intuitive Knowledge whereby he can lay down Principles, on which he may presently build ; yet if *Hypotheses* flow from things done, and from those Observations only, which practical and natural *Phænomena* suggest, they will remain firm and unshaken, so that tho' the Practice of Physick, if you respect the order of writing, may seem to rise from *Hypotheses*, yet if they are solid and genuine, they in some sort owe their Original to Practice ; for instance, in *Hysterick* Diseases, I do not therefore use *Chalybeats*, and other things that invigorate the Blood, and forbear things that evacuate, (unless upon some Circumstances, and use rather *Paregorick* Remedies ;) because I first took it for granted ; that this Disease proceeded from the Animal Spirits being weakned and broken : But when the constant Observation of practical *Phænomena* had taught me, that the giving of purging Medicines always increased the Symptoms, and that things contrary, were wont to quiet the same Symptoms, I took my *Hypotheses* from this and other Observations of the natural *Phænomena*, so that the Philosopher should here serve the *Emperick*. But if I had began with an *Hypothesis*, I should have been as mad, as he that should go about to tile a House, before he has laid the Foundation, which is only proper for those to do, that build Castles in the Air, as they say, and they have a Privilege to begin at which end they please.

But to return to the business, whatsoever these Passages are, through which the Water passes from the Cavity of the Belly into the Intestines, I am certain, that Vomiting provoked by the said *Emetick* does powerfully evacuate the same ; and not only downward by Stool, but also upward through the Stomach and Mouth in the Act of Vomiting ; for after Vomiting twice or thrice, the Waters do not seem so much to be drawn by the Secretory force of the Medicine, as to run with a full Stream, the Stoppages being broken and opened, which appears plain enough by the frequent impetuous Irruption of them betwixt the spaces or intervals of vomiting.

Last *August* a certain poor Woman of Fifty five Years of Age, or thereabouts, implored my help; she had an Ague, a long while; and afterwards was Prisoner three Years; she had suffered much by Cold, and her Belly was bigger than ever I saw any before. I gave her an Ounce and an half of the Infusion of *Crocus Metallorum*, three days following, afterwards every other day, according to her Strength, till she had taken six Doses; her Urine was quite stop'd, after she had vomited sometimes at first, but she rendered it again sometimes by Intervals, tho' very rarely; the oftner the Vomit was repeated, the greater quantity of Water was wont to be ejected, and towards the end by the Mouth as well as by Stool. But after the third Dose, the Tumour began to subside, and to be lessened; and after fourteen days, by the Thread wherewith I ordered her Body to be measured when it was swelled, she appeared to be a Yard less in compass, and by computation she evacuated some Gallons of Water upward and downward, so that whereas before she was forced to sleep in her Bed upright, fearing if she should lie down, she should be suffocated by the weight of the Waters, now she could securely lay her Head upon the Pillow, and turn from side to side, as she pleased. But because the said Vomits, by reason of the violence of their Operation, did raise the Vapors, as they call them, to that degree, that it was not safe any longer to use them, and yet notwithstanding, it was very manifest by the remaining swelling of the Belly, and the motion of the Water, which she perceived, as often as she turned her self from side to side, also by the Pits remaining in the Leg, after being pressed by any thing, that there was yet much Water in the Body; wherefore I was forced to finish the Cure with purging things, properly so called; therefore afterwards I prescribed, either the purging Potion above-mentioned, or some other *Hydragogue*, seldomer or oftner, according as her Strength, and the Vapors would permit. For purging downwards does in some sort also occasion *Hysterick Disorders*, tho' not so great and violent, as *Emeticks* are wont to do. I continued this Method till she seemed quite well, and while she was under cure these things worth observation occurred; First, on those days she did
not

not purge, she voided a great quantity of Water by Stool, and towards the latter end by the Urinary-passages a Gallon, tho' I did not allow her to drink above a Pint and an half, or a Quart for each day; so that all the Passages seemed to be every where open. Secondly, it is worth notice, that when the Cure was almost perfected, the Vapors were raised by the Purges, and the Belly swelled very much upwards, as it were filled again with Water, which yet I knew could not be, because she drank so sparingly; and therefore, that the Tumour arose only from Wind, which proceeded from the Confusion occasioned by the Purges; and the Event confirmed my Opinion of it; for tho' she evacuated a Gallon of Water in a day when she was purged, yet notwithstanding, she began to swell presently, nor did the Tumour abate, but rise up to the Throat, and caused a difficulty of breathing, till the Body freed from the disturbance of the Purge, had obtained its natural state and quiet; after which, the Swelling and other Symptoms vanished of a sudden, till they were irritated again by the succeeding Purge. Lastly, it is to be noted, that the said Woman being about Fifty five years of Age, and not having had her Courses for many Years, yet they broke out again violently, which Flux of weakned Blood being added to the foregoing Evacuations, wonderfully increased the Train of *Hysterick* disorders, namely, a violent Pain in the Back, and about the Region of the Spleen, the Head-ach, and a great *Catarrh*; moreover, tho' after so great a quantity of Water evacuated by Vomit, Stool, and Urine, it was very probable, that much could not remain in the Body, yet the Belly swelled as much as it used to do, when no Evacuation was used. Wherefore to quiet these Motions, which caused a disturbance for a week after the last Purge, I was forced to give an Ounce and an half of *Diacodium* for four Nights following, which dose was also to be repeated within three hours, if she did not fall asleep, whereby at length all things were quieted, and the Tumour disappeared.

But it is to be noted, that if the Belly be but a little swelled, the Waters are not so easily evacuated by the Infusion of *Crocus Metallorum*, as in a great Dropsy, where there is a very great quantity of Water; for the bulk

bulk of the Water, when it is agitated, and shook by the Operation of the Vomit, wonderfully conduces to the Evacuation of it. Wherefore, unless the Belly be very much swelled, it is best to do all by things that purge downwards.

There is another Medicine that is very common, and simple, that cures a Dropsy in the same manner that does we have now mentioned, namely, three handfuls of the inner Bark of Elder rasped from the Wood into two Quarts of Water and Milk mixed together, and boiled to a Pint; half a Pint of this Decoction is to be taken in the Morning, and the other half in the Evening daily, till the Patient is well. This Remedy vomits and purges, in like manner as *Crocus Metallorum* does, and so cures the Disease the same way, and not by any specifick Quality; for when it performs neither of these Operations, or if moderately or sparingly, it does no good at all: But when it does effectually work either way, but especially if both ways, it cures this Disease in a wonderful manner.

But truly it should be carefully minded, which often happens, that Water is put off upon the Legs and Thighs, and also into the Belly, and yet it must be by no means evacuated upwards or downwards: For instance, when such a Tumour follows a long Consumption, or when it is occasioned by the Putrefaction, or fault of the Bowels, or by the Tone of the Blood, if it be lawful to say so, not only relaxed but spoiled, the Spirits being quite exhausted, or by reason of the long continuance of a *Fistula* in the fleshy parts, which has heaped up a great quantity of Sanies, or by too great a Weakness and Evacuation of the Humours and Spirits, by Salivation, sweating, or too much purging, or by a thin Diet in the cure of the French-pox, which has been stricter than was necessary: In these and other Diseases occasioned in this manner, the Sick is not only not relieved by purging, but the Tone of the Blood being more weakened thereby, the Disease is increased; wherefore in these Cases, the whole of the business is to be performed by such things, as strengthen and confirm the Blood and Bowels: Among other things of this kind, besides Remedies that comfort, which are to be mentioned below, I have certainly

tainly found, the change of the Air, and exercise in a free Air, such as the Sick can bare, have answered this Indication excellently well, the Spirits being by this means revived, and the Organs of Secreion fitted to perform their Office again.

It also happens that when there is none of the Cases mentioned above, we must not always answer the Intention, which respects the Evacuation of the Water, either by Purging nor by Vomiting; for when the Patient is of a weak Constitution, or a Woman that is very subject to the Vapours and Disorders of the Animal Spirits, we cannot perform the business by *Catharticks*, much less by Vomits; here therefore, the Evacuation of the Water must be managed by *Diureticks*, among which, tho' many are much cryed up in the Writings of Physicians, yet I think the most effectual, nor to say the only, are made of *Lixivial Salts*. It matters not, of what kind of Vegetable the Ashes are made: But because, scarce any other Vegetable can be easier got than Broom, and because it is well approved of in this Disease, for the most part I order a Pound of the Ashes of it to be infused cold in two Quarts of Rhenish-wine, adding to it one or two Pugils of common *Worm-wood*; the Sick must take four Ounces of the Liquor filtrated in the Morning, arfive in the Afternoon, and in the Evening daily, till the Tumour vanishes, with which Remedy alone, I have known some Dropsies, that here counted deplorable, cured in those, whose weak Constitutions could not bear Purging.

The Waters, to hasten to the second Intention, which are the next cause of the Disease being quire evacuated, but half the Cure is performed most commonly, unless the weakness of the Blood, which is the Origin of the Disease, be removed by a long and daily use of heating and strengthening Medicines, to prevent a fresh Stool of Waters; for tho' it often happens in young People, that when the Waters are well purged off, they recover without any more ado, their natural heat being freed from the Burthen of the Waters, supplying the Room of Remedies, yet in ancient People, and in others, who are of an infirm Constitution, it is absolutely necessary, presently after the Waters are quite eva-

cuated, to use those Simples, which heat and invigorate the Blood, among which, those things, which I have commended above, for the cure of the Gout, whether they are Remedies, or the six Non-naturals may be used, besides those which shall be mentioned by and by (only Wine, from which we ought wholly to abstain in the Gout, is not only, nor hurtful in a Dropſie, but very Beneficial if it be used for the ordinary Drink) for these two Diseases agree in this, *viz.* the same strengthening Remedies resist the Original Cause in both; but it must be confessed, that we being taught in both by the manifest *Phænomena*, and by those things that do good or hurt, and these and most other Chronical Diseases take their rise from weakness of the Blood and Indigestion, and being able to know no more, we have as yet, but a Superficial Knowledge of Diseases, being not able to penetrate into the Essential Differences of them, and the specifick Depravations of the Humours, proceeding from such Indigestions, which Indigestion is the common cause of all; nor can we any way understand those various Specifications, which in acute Diseases, flow from one and the same cause, *viz.* the Inflammation of the Blood; wherefore, as well in these, as in Chronical Diseases, *Specificks* being wanting, we are forced to direct the Cure, not to the essential Nature of the Disease, but to the more general cause of them, varying now and then the method of Cure, either according to the spontaneous indication of Nature, which she uses in Eliminating Diseases, or following the Guidance of Experience, shewing by what kind of method of Cure every Disease yields easiest.

Moreover, in order to the fulfilling this intention of which we now treat, *viz.* that the Blood be corroborated, whether the Evacuation of the Water be effected by this Diuretick, or by Purging or Vomiting, as above, it is absolutely necessary, that the Sick, if his condition will allow of it, be ordered to drink Wine all the while he is in Cure (but he must not begin drinking of Wine before the Passages are somewhat opened, and a way made for the Water) or at least, instead of Wine the best Strong-beer; because all sorts of small and cooling Liquors, how agreeable soever they may be to the

Palate

Palate of the Sick, who is almost always thirsty in this Disease, render him more Phlegmatick, and further the Increase of the Water: Therefore they are rarely or never to be allowed, but on the contrary, generous Liquors, if they are not distilled Spirits, do so promote Health, that sometimes alone they cure at the beginning of the Disease, when there is not much Water in the Belly, especially when they are impregnated with heating and strengthening Herbs. In poor People for instance, the Narrowness of whose For une could not allow of better Remedies, I use to order for their ordinary Drink, Strong-beer, wherein a sufficient Quantity of the Roots of Horse-radish, of the Leaves of Common-Wormwood, Garden-Scurvygras, Sage, the lesser Centaury, and the Tops of Broom have been put: For such as are rich, Canary-wine may be impregnated in the like manner with the same bitter Herbs, a Draught whereof may be taken twice or thrice a Day with the Medicines above-mentioned; but Wormwood-wine may be used instead of it, if it be more pleasing to the Palate, whereof the Sick may take nine Spoonfuls after two Drachms of the digestive Electuary described in the Treatise of the Gout, at the Medicinal hours, that is, in the Morning, at four in the Afternoon, and at Night: This Electuary answers this intention excellently well, and very much excels all other corroborating Medicines whatever: But here great Care must be taken, that the Sick drink very sparingly small Liquors; because all whatever they be somewhat increase the Water; for a total Abstinence from Drink has cured some; wherefore if these Liquors are sometimes to be indulged, the Sick must drink very sparingly of them. But because this Disease is wont to be accompanied with great Thirst, which is moreover increased by abstaining from small Liquors, it may be convenient for the Sick to wash his Mouth often with cold Water sharpened with Spirit of Vitriol, or he may hold now and then Tamarinds in his Mouth, or chew a Limon, but he must swallow neither, by reason of the Coldness of them which increases the Disease.

But amongst Corroboratives, Steel is the chief at the beginning of the Disease, for it heats and invigorates

the Blood ; for which reason also Garlick is good ; and I have known a Dropsie cured by it alone, without any Evacuations, by the Prescription of others, not my own.

But it is to be observed, that that Dropsie which swells only the Legs, or the Belly, but moderately, does not presently require to be cured by Vomit and Purges ; for it often yields to the foresaid heating and strengthening Liquors : But above all you must take great notice, when the Cure of this Disease is managed only with strengthening and lixivial Medicines, the Sick must by no means be purged with any gentle or strong Medicine, whilst we endeavour to strengthen the Blood ; for the Cathartick destroys what has been done by the corroborative Medicine, as any one must needs acknowledge, who has observed the Swelling to begin to assuage by Use of Corroboratives, and to be presently increased by Purging : For tho' when we endeavour to answer the Intention of evacuating the Waters, it may not be improper to give now and then Corroboratives : Yet when all the Business depends on strengthening the Blood, we must wholly abstain from Catharticks.

But it is to be noted, that the Sick is not always cured, when we answer both these Intentions, *viz.* when the Water contained in the Belly is wholly evacuated, and also when heating and strengthening Medicines have been used to prevent a new Stock of Water, for it often happens, that a Dropsie continuing for many years, the Waters lying a long while upon the Bowels, pervert their Substance, and half boyls them as it were, and quite corrupts the Bowels and the Neighbouring parts, generating preternatural Glands, and small Bladders full of Sanies, and turning all things contained in the Cavity of the Belly into a sort of Corruption, as Dissection discovers in the Carcasses of those who die of an inveterate Dropsie, and when the Disease is at this height, it contemns, as far as I see, the help of Art ; yet it is the Duty of a Physician, seeing he cannot certainly know how much the Bowels are hurt, to endeavour the Cure all he can, by things that evacuate and strengthen, and not to despond, or to cause the Patient to do so ; and for this reason, he must use his utmost Endeavours in this Case

Case; because in very many Diseases, when the Fomes of the Disease is quite carried off, Nature that assists us Night and Day, wonderfully contrives of her own accord to free the Sick from the pernicious Reliques of the Disease; wherefore every Dropsie, how inveterate soever it be, although it has mightily injured the Bowels, may be treated in the same manner, as if it were just begun.

Topick or external Remedies, so far as I can observe, perform no great matter in this Disease; those are least hurtful, which are applied to the Belly to discuss the Swelling in the Form of a Cataplasim or Liniment: But I do not see by what means they can discuss the Water; but there are other things prescribed by some, instead of Remedies, that instead of doing good, do much hurt, of this sort are Oynments made of the strongest Catharticks, and applied to the Belly, Blisters also applied to the Thighs and Legs, to evacuate the Water when the Parts are much swelled: But both these are dangerous: for by the first the cathartick Force of the Simples is sometimes so thrust into the Muscles and Membranes, that an Hypercatharsis is occasioned, that can never be stopped by any Remedies: But Blisters, that are wont to be applied to the foresaid Parts by Empiricks, quite extinguish the natural Heat, which was almost overwhelmed before by the Waters, the Animal Spirits being also deficient, and so they often occasion a Gangrene, which is too frequent in this Case; the slightest Wound is very difficultly healed in the Flesh of Hydropical Persons, especially in a depending Part; because the very Substance of the Flesh in these Parts so much abound with Water, that the Humour, having got any passage, perpetually flows, and thereby hinders the healing of the Wound; nor in my Opinion can a *Paracentesis*, or the Puncture by a Needle, that is commended by some, be used with less hazard, and greater Success than Blisters.

But to conclude, tho' this Disease, when it is come to a true Dropsie of the Belly, is always counted deplorable, yet it will appear, if it be treated as above, that it may be as certainly cured, if the Bowels are not corrupted, as many others which are not reckoned so deadly.

But perhaps some will blame these Remedies, for being simple, and plainly inartificial; I should rather blame his wickedness, for disliking that others should be cured with such simple Medicines, when he would be glad, that himself, his Wife, or Children, when they are at any time Sick, might recover their Health by the most contemptible means; moreover, the Coxcomb exposes himself; for the Pomp and Dignity of the medical Art, is not so much discovered by neat forms of Remedies, as by curing Diseases.

This is all I have to say of these two Diseases, and I think I shall scarce treat of any other; but as to those I have already published, if any one should vouchsafe to read them but once, I am very sorry, that I should occasion his loss of time; but if he will read them often, and ponder them well, I do not at all question, but he will receive such advantage by them, as will in some sort answer the Desires, and great Labour, which I have bestowed on the making and composing these Observations; for he can only know with what sincerity they have been delivered, by being conversant in the Practice of them, and by being as diligent and curious a Searcher for Observations as I was before him; and if in those few things I have written, I have wholly followed Nature, not pinning my Faith upon the opinion of any Man, how great soever he is, I am sure all wise Men will pardon me, who cannot be ignorant that there are two sorts of Men, who equally obstruct the Improvement of the Art of Physick; the first are those, who adding nothing for the increase of the Art which they profess, despise others who never so little improve it, who hide their defect and stoath under the Pretext of reverence to Antiquity, from whence they say they must not recede a Nails breadth: But why should we confess that all other Arts, which are not of so great Importance to Men, should be so much improved, without any prejudice to the Ancients, and Physick alone, should be reckoned altogether perfect? Could not the Inventors of the more certain Art of Sailing, which now prevails, try the use of the Compass, which succeeds so well, but they must forsooth condemn the first that were so unskillful, that they could not direct their Course any o-
other

ther way than by the view of the Stars, and the windings of the Shore? Or must the more accurate and perfect Art of making and governing Ships in fight, whereby now-a-days, the Western Inhabitants of *Europe* excell all others, defame those Ship-wrights, who made the *Nayies*, that fought heretofore at *Actium*, or *Augustus*, or *Mark Anthony*, who were such great Generals and Admirals? Besides, there are most innumerable examples of things found out, which far excel the Inventions of the Ancients, the Contrivers whereof are no more to be supposed injurious to the Memory of the Ancients, than that Son is to his Father's Fame, who increases the Estate left him by his Care and Industry. There is also another sort of Men, who out of Levity of Mind, affecting the Title of Wits, troublesomely intrude Speculations that no way advance the cure of Diseases, nor so properly shewing the way to Physicians, as making them stray from it by their *Ignis Fatuus*. Nature has bestowed so much Wit on these People, as enables them to trifle learnedly with it: But she has failed them in the prudential part, whereby they should know, that they can understand nothing no other way, than by Experience, which unveils Nature; for the abject Condition of the humane Nature, being unable to rise to an intuitive Science, is restrained to the narrow bounds of Knowledge, which it receives from the five Senses, yet notwithstanding a Man may become as prudent, as the human Lot will allow: But a Philosopher, according to the August Majesty of the name, no mortal Man can ever be: But all the Philosophy of a Physician consists wholly in searching the History of Diseases, and for Remedies, which are found by Experience to be able to cure them, observing, as I said in another place, the method of Cure, which right reason, (founded upon the common and natural way of thinking, and not the Commentaries of Speculations) dictates to him.

P O S T S C R I P T.

BY the Readers leave, I will add one thing of no small moment, in finding out and curing Fevers, which, if I had not forgot, should have been mentioned in a more proper Place. I have observed that every year, from the beginning of Winter to the height of the Spring, a certain Fever invades, which, both as to the Symptoms and Cure, plainly differs from the *Stationary*, or *Epidemick* Fever of the general Constitution, which then prevails, and therefore to be reckoned amongst those Fevers, which I call *Inter-currents*. It seems to rise from the Frigidity of the Air, and the thicknes, and moisture of it, for by this means, the Pores of the Skin are shut, and the Blood by reason of Transpiration hindered, is burthened with a heap of serous Matter, which at length becoming offensive, and putrefying by its long continuance, easily kindles a Fever: upon taking Cold, or upon some slight occasion; and if the Matter causing the Disease be very much, that Fever arises, which I described under the Title of a Bastard *Peripneumonia*, Chap. 4th Sect. 6th of my Book of acute Diseases. But if the Humour does not so much abound, it only produces those Symptoms, which I am now about to describe. The Sick for a day or two, after the beginning of the Fever, is sometimes hot, sometimes cold, he complains of a Pain in his Head and Limbs, and of Restlessness over his whole Body, his Tongue is white, and his Pulse not much unlike the Pulse of a well Person, his Urine is thick and very red, his Blood is like that of *Pleuriticks*, there is most commonly a Cough, but the Difficulty of Breathing, Straitness of the Breast, and Pain of the Head in Coughing, as if it were cleft, does not accompany this Cough, as they are wont in a Bastard *Peripneumonia*. And moreover, this Fever is not accompanied with the more remarkable Signs of a *Peripneumonia*, tho' it differ from it only in degree; I call this the *Winter-Fever*.

This Disease, tho' at its first coming, it has only the Symptoms that arise from taking Cold, yet if it be ill managed,

managed, it draws after it a long Chain of great Ills, which at length kill, for when the Sick is confined to his Bed, and has been punished with I know not what Cordial things to provoke Sweat, and carry off the Fever, (but its seldom done) a *Delirium*, *Lithargy*, a Languid and inordinate Pulse, dry Tongue, red Spots, and sometimes looking almost livid, too often accompany this Fever. This and such like Symptoms, altho' some impute them to Malignity, as they love to term it, yet they are really to be ascribed to ill Management; for this Fever of its own Nature, having too much of an Inflammation, the Blood is yet more fired by Cordials, and keeping continually a Bed, so that the Spirits are driven into Confusion, and inordinate Motions, and the *Morbifick* Matter being cast upon the Brain, all things go to wreck.

In curing this Fever, I propose this method, *viz.* to cause a Revulsion of the stock of Flegm abounding, that was heapt up by the Analogy of Winter, by bleeding, and to carry it off by repeated Purges, and in order to this, as soon as I am called, I order Nine or Ten Ounces of Blood to be drawn from the Arm, and the next day I give my common purging Potion, *viz.*

Take of Tamarinds half an Ounce, of Sena two Drams, of Rhubarb one Dram and an half; boyl them in a sufficient quantity of Water; to three Ounces of the strained Liquor add of Manna, and Syrup of Roses Solutive, each one Ounce; mingle them, make a Potion to be taken early in a Morning.

I repeat this Potion twice, a day being berwixt each Purge; if all the Symptoms do not go off before, of the days he does not purge; if he has a Cough, I order him to take the pectoral Decoction, and a *Linctus* made of Oyl of sweet *Almonds*, and of the Syrups of *Maidenhair* and *Violets*, now and then, and to suppress the too great heat of the Blood. If the Fever be very raging, I prescribe an Emulsion of the cold Seeds; however the following Julep.

Take

Take of the Waters of Water Lillies, Purslain, and Lettice, each four Ounces, of Syrup of Limons one Ounce and an half, of Syrup of Violets one Ounce; mingle them, make a Zulep, whereof let him drink as oft as he will.

In the mean while, I order the Sick to keep from Bed adays, and from eating Flesh; but after the first or second Purge, I allow, that now and then he should drink a Draught of thin Chicken-Broth. But it is to be noted, that if any violent Symptom, as difficulty of breathing, or a lanching Pain of the Head in Coughing, shew that this Disease is near a Bastard *Peripneumonia*; in this Case both Bleeding, and Purging are so often to be repeated at due Intervals, till all the Symptoms quite vanish, and the Sick is to be treated carefully in the manner we have described in the said Chapter. But it is very rare that this Fever whereof we now speak, is so violent, that after once Bleeding, and thrice Purging, it should want more Evacuation: But enough of this, tho' I thought it necessary to mention it, that this Winter-Fever might not be counted Stationary, or a general Epidemick Fever of any Constitution, for I certainly know, that many Men have died, either because this was neglected, or not known.

To the Worthy, and Learned Dr. Charles Goodall, Fellow of the College of Physicians.

WHEN I resolv'd to Publish what I lately observ'd concerning the Fever of this present Constitution, I thought I ought to Dedicate it to you, worthy Sir, above all others, and I count I ought to do it chiefly for two Reasons; First, because you are my Faithful Friend, and Constant Companion, and have always stood by me, and defended me against all that have any way oppos'd me, which you did not do so much for my sake, as on the account of a generous Principle, and a great and honest mind, whereby you were induc'd to side with Truth,

Truth, when almost every Physician inveigh'd against me; and yet there is no reason I should be angry with them; nor indeed am I angry with them, for so many Quacks that boast of their Fancies and Fictions, have so often imposed on the World, in order to increase their Fame, that it was the Duty of Wise and Ingenious Men not to admit presently without Examination, such things as I propos'd, that were contrary to the received Method of Practice. Yet notwithstanding I am as much oblig'd to you, and therefore I thought it my Duty to testify publickly my Respects to you; for scarce any Virtue more becomes humane Nature, when it is arriv'd at the very height; for as Kings endeavour to render their Favourites illustrious, and to distinguish them from others, by Titles of Honours, and Coats of Arms, so when Nature would separate this or that Man from the crowd and herd of Men, she is wont to make him grateful, that being as it were the Mark and Character of a noble Spirit. This is the other reason why I dedicate especially this Treatise to you, viz. because we being familiar and conversant together daily in a manner for many years, you know best what Pains I have taken in collecting Observations, for the History and Cure of those Diseases, I have publish'd: And tho' I have not Printed them altogether, and at once, but at some years distance, according as I came to understand them, yet notwithstanding, I think them so lame and imperfect, that I ought rather to be ashamed, than to expect Praise from them; but however it be, this at least may be said in my excuse, viz. that tho' the space of Thirty years wherein I have been very diligent in the Observation of Diseases, may seem sufficient to make a greater Progress in the Knowledge of them than I have made; yet I boldly affirm, that tho' so much time is more than needs to confound the Brain with Theorems and Fictitious Comments, collected from Books (all which no more conduce to the Cure of Diseases, than the Art of Painting to the Art of Navigation) yet four times the number of years would not be sufficient, even for a Man that is constantly employ'd in the Practice of Physick, to perfect the same in every part of the physical Art. I have endeavour'd all I could,

to

to collect the most accurate Observations, and I have published them forthwith, that if there was any thing that was good in them, the Publick might presently receive it: and therefore having done my Duty, my mind is quiet, and I am not at all solicitous, how others will esteem my Writings. I will only add this, that as he that does not value them will do me no hurt, so he that only reads them but once, will not be much benefitted thereby. But to pass by these things, I beseech you, candid Sir, to accept kindly of this Treatise, whereby I publicly own how much I respect you, which also all others do, that know less of your Virtue than I do; nor can any one imagine, that I who no way depend on you, flatter you, when I publicly profess, that as you are second to none in the Art you exercise (to speak modestly) so you excel all others I ever knew for Integrity, and Honesty. May you live long after I am dead, and be the chief Physician, not so much for scraping Money together, for the benefit of your Posterity (which compared with what follows is in a manner agreeable to the Nature of a Beast) as by shewing the World by what means the Difficulties in curing Diseases, that have hitherto perplex'd, and overcome the medical Art, may be removed, in doing which, you, if you please, may build on the Foundation I have laid; only I would have you kindly, and publicly correct the mistakes I have perhaps made, in my Observations either in the History or Cure of this, or that Disease, when you shall be better informed by long, and repeated Experience, and in so doing you will not injure the Memory of the dead, who when he was living desired above all things the furtherance of the medical Art, by whomsoever it was done; yet not so much by Learned Comments, on the Nature of Diseases (wherewith we have been already a long while nauseated) as by a certain and faithful method of Curing them. Farewel, worthy Sir, and continue your Kindness to me.

Your Obliged Servant,

Tho. Sydenham.

The

The Monitory Schedule, concerning the coming of the new Fever.

THO' my old Age, worn out almost by long Sickneſs may well require on that account a Writ of Eaſe, and a Ceſſation from deep Thoughts, the labour of the Brain; yet I could not forbear, but I muſt be buſied in the procuring the Health of others, tho' even by the loſs of my own, when my Acquaintance informed me of the entrance of a new Conſtitution, from whence proceeded a new ſort of Fever, much unlike thoſe that lately reigned.

We muſt remember that in *Autumn* 1677 intermittent Fevers firſt encreaſed and advanced daily, and were *Epidemical* till they came to their State; afterwards they decreaſed by degrees, and ſo rarely appeared the laſt years of this Conſtitution, that they could not be counted *Epidemical*; and on this account we muſt likewiſe take notice, that the two laſt years of the Conſtitution now going off, had two very ſevere Winters, eſpecially the laſt ſave one, *viz.* the Year 1683; in which the Season was ſo vehemently cold, that no Man living ever ſaw the like as to the intense degree of the Cold, and the long time it held. For the noble River of *Thames* was ſo froze that it eaſily ſuſtained, like a ſolid Pavement, Coaches running about upon it, and Shops well furniſhed in a manner of Streets, and great crowds of People. Tho' the following Year 84, did not equal the preceding, either as to the Extremity of Cold, or obſtinate Duration of it, yet it did not come much behind it as to either; but as ſoon as it thawed in *February*, in the Year 85, this Fever began, that I now treat of, which I take to be a new ſort of Fever, and wholly different from that which has prevailed for theſe Eight years laſt paſt.

I cannot certainly ſay, whether the change of this Conſtitution is to be attributed to the Alteration of the manifeſt Qualities of the Air, which ſucceeded for theſe two Winters; for I have obſerved, that Alterations as to the ſenſible Qualities of years how different ſoever, have

have not produced Species of *Epidemick* Diseases; and that a certain Series of years (tho' one year has differed from another, as to outward Appearance and Temperament) have notwithstanding all agreed in producing of the same Species of *Stationary* Fevers; which when I had considered seriously, I was of the Opinion, as I have mentioned in another Place, that the change of a Constitution chiefly depends on some secret and hidden Alteration in the Bowels of the Earth, passing through the whole *Atmosphere*, or from some influence of the Celestial Bodies. Tho' it is to be observed here, that when the Depuratory Fever heretofore went off, a very dry and violent Frost from the beginning of Winter 64. froze up all things, nor did it abate at all till the beginning of *March*, at which time, as soon as the Frost went off, a Pestilential Fever, and soon after the Plague began to rage. But however this may be, the Fever which we now treat of began at the time aforesaid, viz. in *February* 84. and was more spread through all the parts of *England*, and more *Epidemical* in other places than here in *London*, the year before, and this Year.

When I was first called to this Fever, I firmly believed, it was not of that kind of Fevers, which I call *Stationary*, but rather of the Family of Inter-currents, which come promiscuously almost in all years; so wit, that it was nothing else than that Bastard *Peripneumonia*, which I have heretofore prescribed in my Book of acute Diseases, only with this difference, that in this Fever the Symptoms did not appear now and then, which were more *Parabognomonick* in the *Peripneumonia*; such are a violent Cough, a violent Headach in Coughing, cleaving as it were the Head, a Giddiness upon any Motion, and a great Difficulty of breathing, all which did most commonly accompany the Bastard *Peripneumonia*. When therefore the Bookseller desired a new Edition of my Works at that time, I published my Conjecture in the Postscript, in which I perceive my self mistaken; and truly, I was led into this Error, by the great and manifest Agreement, which was between this Fever, and the foresaid *Peripneumonia*, which comes now and then every Winter; but the Summer coming on, which was wont to vanquish these *Peripneumonick* Fevers, and this notwithstanding

withstanding continuing, I was soon convinced of my Error, being wholly perswaded that it was to be reduced to a new Constitution.

After as diligent a search as I cou'd make, the Symptoms I observed are, and were for the most part these. The Sick is cold and hot by Turns, and often complains of Pain of his Head and Limbs; the Pulse is like the Pulse of those that are well; Blood taken away is most commonly like the Blood of Pleuriticks; the Patient for the most part is troubled with a Cough, which together with other Symptoms accompanying a gentle *Peripneumonia*, goes off so much the sooner, by how much longer the Disease invades from the Winter. A Pain seizes the Neck and Jaws, sometimes at the beginning of the Disease, but it is less than in a Quinsey; tho' the Fever be continual, yet it has violent Exacerbations often towards Night, as if it were a double Tertian or Quotidian. The Sick is much endangered by keeping his Bed constantly, tho' he has but very little Cloaths on, for by that means the Fever being turned upon the Brain, he soon falls into a Coma or Phrensie; and to speak truth, the Inclination of this Disease to a Phrensie is so great, that it often creeps on of a suddain of its own accord, without any such occasion. But the Phrensie does not rise with so great fury in this Fever, as in that with which those that have the Small-pox, and other Fevers, are seized; for the Sick rather doats, muttering now and then some odd words. *Petechiæ* very often break out by reason of the unseasonable Use of Cordials, and too hot a *Regimen*, and in young People of a hot Constitution, Purple-spots, the certain Signs of a high Inflammation, as well in this as in any other kind of acute Diseases; and sometimes Eruptions, which they call *Miliaries*, sprinkle themselves over the Surface of the Body, and are not very unlike the Measles, only they are redder, and when they go off they do not leave behind those branny Scales which are seen in the Measles; tho' they come sometimes of their own accord, yet most commonly they are forced out by the Heat of the Bed and Cordials. The Patients Tongue is either moist or dry, according to the Method which has been used; when it is dry, it is of a dusky Colour in the middle, which

is

is hemmed round with a whitish Fringe : but when it is moist, it is all white, covered also with a white and filthy Skin : For if the Sick be too much heated by the Method used, the Tongue is most commonly dusky and dry, but if not, it is moist and white. This is also to be affirmed of Sweat, which flows according to the different Method aforesaid ; for if the Sick be treated with too much heat, it is in a manner viscous, especially about the Head ; and tho' it flow freely, and from all parts, yet the Sick has little ease by it : So that it is evident that such Sweats, are only Symptomatical, not Critical. Sweat forced by Art at the beginning of the Disease, used to put off the Morbifick matter, if not on the Head, at least upon the Limbs. But when the Fever has possessed the Head, and the Phrensie has once prevailed, then no signs of the Fever remain, only the Pulse is sometimes quicker, sometimes slower. But at length, when by ill management, the Spirits are driven into a Confusion, the Pulse is inordinate, with a *Subsultus* of the Members, and Death soon follows.

As to the Cure : These signs of the *Peripneumonia*, which accompanied this Fever last Year in February, in which it first began, made me believe presently after Winter, as I said before, that it ought to be reckoned with the Family of *Peripneumonicks* ; and therefore I presently betook my self to that Method, which I have heretofore commended in the Cure of a Bastard *Peripneumonia*, which truly was very successful to me, in those few, I was scarce able to take care of because of my Sickness, and to others who were pleased to try it upon my Commendation. Whatever it was that persuaded me to use this Method, I am now fully satisfied, having considered the *Phænomena* of the Disease, and the Temperateness of the last Year, which followed the two cold Winters (especially of the Winter, if it could be called so, for it brought with it no considerable Cold) I say it is evident to me that this Fever is nothing else than a simple Inflammation of the Blood, and that therefore the curative Indications are wholly to be directed to the suppressing of the said Inflammation by proper Remedies and Methods.

There

Therefore I proceed after this manner; first I order ten Ounces of Blood to be taken from the Arm; and indeed this Fever (how like soever the Blood be most commonly to that of Pleuriticks) does not easily bear repeated bleeding; but if a difficulty of breathing, a lancing Pain of the head in coughing and the like, signify that this Disease tends to a bastard *Peripneumonia*, then bleeding and purging are to be repeated, until all the Symptoms rotally vanish, as I have said in the Chapter of a *Peripneumonia*; and I desire this may be seriously minded.

In the Evening I apply a Blister to the Poll, and next Morning give this lenitive Potion.

Take of Tamarinds half an Ounce, Leaves of Senna two Drachms, Rhubarb one Drachm and an half; boil them in a sufficient quantity of Water to three Ounces; in the strained Liquor dissolve of Manna and Syrup of Roses Solutive, each one Ounce; mingle them and make a Potion to be taken early in the Morning.

Which I order to be repeated every other Day for thrice; and this or the like *Paregorick* to be taken at Bed-time after every Purge.

Take of Cowslip-water two Ounces, of Diacodium one Ounce, of Juice of Limons fresh drawn two Spoonfuls; mingle them and make a Draught.

Viz. To prevent the Sick's being Comatose, by reason of the Confusion of the Animal Spirits, which purging often occasions, by the Tumult it raises in the Blood and Humours of those that have Fevers; which Symptom is cured by Hypnotick Medicines, tho' they seem to promote it: For which reason not daring to give a Purge in the Comatose Fever of the Year 73, I persisted in the Use of Glysters; for I knew that purging Medicines used at that time, presently caused a Coma, which perhaps would have happened otherwise, if I had thought of giving a *Paregorick* after such a Purge. But when the Sick does not purge, we must not give a *Paregorick* at Bed-time, lest it hinder the Operation of the Cathartick,

which is to be taken the next Day, (which is usual tho' it be taken late) but if it do not wholly stop it, it will render it less effectual. It is a Rule with me in this and other Epidemick Fevers, not to purge either in the beginning or state of the Disease, unless Bleeding hath been first used: Which indeed by being either neglected or violared has occasion'd the Death of many, especially of Children, as I have in another place admonished by way of Caution.

But we must take notice, that tho' for the most part the above-mentioned Evacuations ought to be used in the Cure of this Fever; yet often the Patient, if he be a young Man or Infant, presently recovers after bleeding, and being once purged: And there is no occasion for more, the Fever being conquered by the first; but on the contrary it is sometimes necessary that Purges should be used oftner than we said before. For it sometimes happens, tho' rarely; that the Sick being freed by this Method, relapses in a few Days after by reason of the Febrile Matter growing crude again; but it is presently carried off by the Purge repeated the fourth time; tho' this new Fever seldom happens under this Method, unless it be occasion'd by *Aphtha*, coming at the latter end of the preceding Fever, and now being at their height, recal it; which Fever is indeed only Symptomatical. And the Hickcocks returning by Intervals often follow it, which also remain for some Days after the Fever is gone off; but at length vanish of their own accord, as the Patient gets Strength, which is diligently to be observed, for as much as there is no danger from the Hickcocks coming at the latter end of this Fever, unless many Medicines are over officiously and unprofitably crammed in, and then Death is instead of the Physician; but both the *Aphtha* and Hickcocks, or either of them, if they do not go off of their own accord, but continue a long while, may be easily cured by the *Peruvian Bark*, viz. an Ounce with a sufficient Quantity of the Syrup of Erratick Poppies, either in the Form of an Electuary, or Pills taken after the manner I set down heretofore in my Epistle to Dr. Brady, and drinking upon it a Draught of Posset-drink. Which Remedy I have found by Experience more certain in this case than any other whatever, if its Virtue be

be not spoiled (as commonly it is) by the Patient keeping his Bed continually.

I sometimes prescribe the following, or the like, on the Days the Purges are not taken :

Take of the Conserve of Wood-sorrel, of Hips, each one Ounce ; Conserve of Barberries half an ounce, Cream of Tartar one Drachm, with a sufficient quantity of Syrup of Limons ; make an Electuary ; of which take the quantity of a Nutmeg thrice a day, drinking upon it six Spoonfuls of the following Julep.

Take of the Waters of Purslain, Lettice, and Cowslips, each three Ounces, of Syrup of Limons an Ounce and an half, of Syrup of Violets one Ounce ; mingle them, make a Julep.

Or,

Take of Fountain-water one Pint, of Rose-water, of the Juice of Limons, of White-sugar, each four Ounces ; boil them over a gentle Fire, till all the Scum be risen : Take three Ounces at pleasure.

But in all these things I forbear the using of Spirit of Vitriol, tho' it be very cooling, because it is not proper in any Diseases that are cured by purging, by reason it is so very styptick, not to mention now the Mineral-nature of this Spirit.

It often happens, especially towards the end of this Fever, that the Sick, when he is treated after this manner, sweats now and then of his own accord in the Night, by which all the Symptoms of the Disease are very much mitigated : But notwithstanding, seeing we cannot trust to such Sweats, we must by no means intermit the foresaid Method ; because if the Sick should indulge those Sweats for a longer time, the Fever, which the preceding Purges had in some sort overcome, would again revive ; for if the Sweat be contracted beyond that time, in which the Febrile Particles prepared by due Coction are wholly carried off, the Sweats that follow do nothing else, but kindle the Flame afresh ; wherefore tho' those Sweats which flowed spontaneously were per se critical, with respect to the casting out of the

Febrile Matter, which is fit for Expulsion, yet the others that follow may be only Symptomatical, and so do more hurt than good. To be short, the gentle heat of the Bed at Nights opportunely favours such Sweats as of their own accord come in the Night; wherefore the Sick should have no more nor thicker Cloaths on, than he used to have when he was well, nor should any hot Remedies be given. Only let him keep his Bed a little longer than he was wont, in the Morning following, and afterwards let him go on in the Method of Cure above prescribed.

His Diet is to be Oat-meal and Barley-broaths, and now and then a roasted Apple, and after the second Purge Chicken-broath. I order Small-beer cold for his ordinary Drink, and the white Decoction made of one Ounce of Harts-horn calcined, and boiled in three Pints of common Water, and afterwards sweetened with white Sugar.

It is not necessary, as I have said in another place, after the taking of two Purges, to forbid the eating of Chickens, and the like, of easie Concoction; for this way of Cure by purging indulges the same, which could not be allowed, if he went on another way; moreover after the last Purge, if the Fever has a little spent it self, and is not yet turning to an Ague, three or four Spoonfuls of Canary-wine may be taken Night and Morning, and after Dinner, for some Days, by which the Strength may be sooner recovered, and the Febrile Fits averted.

But for as much as this kind of Fever is more prone than any other I ever yet saw, to assault the Head, neither can it be removed from thence without great difficulty: I seriously advise my Patients, that they lie a-bed naked only a Nights; but if they are so very weak that they cannot sit upright, I permit that they should lie upon their Bed and Couch with their Cloths on, with their Heads a little elevated; neither do I allow them any more Fire in their Chambers, than when they are well.

And as this *Regimen* is to be observed from the beginning, in all that are seized with this Fever, (excepting Women taken on the first Days of Child-bed) so it is necessarily enjoined, when the Physician is called to a Patient,

Patient, who, because of too hot a *Regimen*, has been seized with a Phrensy, *Petechiz* or Purple-spots, or any other Signs of a violent Inflammation; for in this Case tho' Blood be taken away, tho' the Body be lightly covered, and whatever cooling Liquors are drunk, yet the Fever will not cease till the Sick keeps from Bed a-days, for as much as the Heat of the ambient Air, kept in by the Coverings, too much exagitates the Blood, and the lying Posture of the Body forces the same with violence on the Head; but when the Phrensy has once prevailed, by reason of an ill Method, it cannot presently be ramed, neither is it safe to endeavour the Cure by repeated bleeding and purging beyond the Bounds prescribed; but at length it will go off at its own time, and of its own accord, by the help of the Method above-mentioned. But nothing conduces more to the removal of it than shaving the Head; and therefore I always order it without applying a Plaister, only a Cap so thick as may compensate the loss of the Hair, or at least defend the Head from external Cold; by this means the Head is extreamly cooled and refreshed, so that by degrees it may be able to vanquish the hot Impressions that cause the Phrensy.

And what has been said of a Phrensy, may likewise be affirmed of a Coma that comes upon this Fever, in which, as in the said Phrensy, the Febrile matter is carried up to the Head; and so, if you except the Whiteness of the Tongue, there are no signs of a Fever; for the Patient seems to be altogether freed from it. In this Symptom, as in the other, Catharticks, Sudorificks, Blisters, and the like, are not only used without Success, but do a great deal of hurt; for such Evacuations procure Death, sooner than the Cure of this Symptom: Wherefore after general Evacuations by bleeding and purging, the Business is to be committed to Nature and Time, tho' this Symptom terrify the By-standers; for tho' the Patient be stupid for a long time, yet he will recover his Health after many days, if he be not continually kept a-bed, but is taken out of it a Days, and laid upon a Couch, or on the Bed with his Cloaths on; in the mean while his Head may be shaved, and at the latter end of this Symptom, three or four Spoonfuls of

Canary-Wine may be given twice a Day. But I have treated largely of this in the fifth Section, and second Chapter of my Book of acute Diseases, where I discoursed of a notable Coma, that accompanied that Constitution.

But as to the Fever the Physician is not to be deterred from making the foresaid Evacuations, if upon feeling the Pulse, he should perceive a twitching of the Members, or a convulsive Motion of the Body; for as much as in some kind of Diseases of the Nerves, both bleeding and purging do not only not do hurt, but are necessarily prescribed; of which I will produce an Experiment I made in a certain kind of Convulsion, which is vulgarly called *Chorea Sancti Viti*, of which Disease I cured no less than five, by bleeding and purging by Intervals; of which sort of Disease I will speak somewhat, seeing it occurs opportunely, and evidently confirms the Truth of what I have now asserted. *Chorea Sancti Viti* is a sort of Convulsion, which chiefly invades Boys and Girls, from ten Years of Age to Puberty: First, it shews its self by a certain Lameness, or rather Instability of one of the Legs, which the Patient drags after him like a Fool; afterward it appears in the hand of the same side; which he that is affected with this Disease, can by no means keep in the same Posture for one moment, if it be brought to the Breast, or any other Part, but it will be distorted to another Position or Place by a certain Convulsion, let the Patient do what he can. If a Cup of Drink be put into his Hand, he represents a thousand Gestures, like Juglers, before he brings it to his Mouth; for whereas he cannot carry it to his Mouth in a right line, his Hand being drawn hither and thither by the Convulsion, he turns it often about for some time, till at length happily reaching his Lips, he flings it suddenly into his Mouth, and drinks it greedily, as if the poor Wretch designed only to make sport. For as much as this Disease seems to me to proceed from some Humour rushing in upon the Nerves, which provoke such Preter-natural Motions, I think the curative Indications are first to be directed to the lessening of those Humours by bleeding and purging, and then to the strengthening the *Genus Nervosum*, in order to which I use this Method;

rhod : I take seven Ounces of Blood from the Arm, more or less, according to the Age of the Patient ; the next Day I prescribe half, or somewhat more, (according to the Age, or the more or less disposition of the Body to bear purging) of the common purging Potion above-described, of Tamarinds, Sena, &c. in the Evening I give the following Draught :

Take of Black-cherry-water one Ounce, of Langius's Epileptick-water three Drachms, of old Venice-Treacle one Scruple, of Liquid Laudanum eight Drops ; make a Draught.

I order the purging Potion to be repeated thrice, once every other Day, and an *Anodyne* Draught the same Nights ; afterwards I prescribe bleeding and purging as before, and so alternately I bleed and purge till the Sick has bled three or four times, and after every Bleeding purge so often as his Strength will bear ; only it must diligently be noted, that there must be so much space between the Evacuation, that the Sick receives no Damage from thence. In those Days purging is not used, I prescribe as follows :

Take of the Conserve of Common Wormwood, of the yellow Rind of Oranges, each one Ounce ; Conserve of Rosemary-flowers, half an Ounce ; of old Venice-Treacle and Nutmegs candied, each three Drams ; of Ginger candied one Drachm, Syrup of the Juice of Citrons a sufficient Quantity ; make an Electuary ; of which take the Quantity of a Nutmeg in the Morning, and at five a Clock in the Evening, drinking upon it five Spoonfuls of the following Wine.

Take of the Roots of Peony, Elicampane, Master-wort, Angelica, each one Ounce ; of the Leaves of Rhue, Sage, Bettony, Germander, white Hore-hound, and the Tops of the lesser Censaury, each one handful, of Juniper-berries six Drachms, the Rinds of two Oranges, let them be cut and infused cold in six Pints of Canary-wine ; strain it as you use it.

Take of Rhue-water four Ounces, of Langius's Epileprick-Water and compound Briony Water, each one Ounce, Syrup of Peony six Drachms; mingle them and make a Julep; take four Spoonfuls every Night at Bed-time, with eight Drops of Spirit of Harts-horn: Let a Plaister of Gum-Caranina be applied to the Soles of the Feet.

The more the Sick recovers, the less he drags his Foot, and the Hand is steddier, so that he can bring the Cup more directly to his Mouth; which are certain Signs how much better he is, but tho' to perfect the Cure, I do not advise that he should be bled more than three or four times, yet purging and altering Medicines are to be used till he is quite well. And because he that has once this Disease may easily relapse, I think it expedient that he be blooded and purged for some Days the next Year about the same time, or a little before the Disease first invaded. And truly I suppose that the Epilepsie of the adult may go nigh to be cured by this Method, if the Remedies prescribed were well proportioned to their Age, tho' by reason I have seldom met with this Disease, I have not yet tryed it; but this by the bye.

It sometimes happens in Women subject to Hysterick Fits, that when the Cure has been managed by the foresaid Evacuations, the Fever continues after bleeding and purging, tho' repeated; in this Case the Fever that now prevails is plainly continued by the Commotion of the Spirits caused by the Evacuations; and therefore all other things being omitted, the curative Indications are only to be directed to the quieting of the Fury of the Spirits, if there be no Signs of a *Peripneumonia*, or Inflammation about the Vital Parts. In order to which an *Anodyne*, that is sufficient to cause Sleep, ought to be prescribed every Night, and also Hysterick-remedies properly so called, twice or thrice a Day, such are Pills made of *Galkanum*, *Assa-fatida*, *Caster*, and the like; and Juleps of the same nature, described in my Treatise of Hysterick Fits. Moreover that Meat and Drink which is most agreeable to the Appetite of the Patient ought to be allowed to recover the Strength, and to suppress the Vapours, as they call them.

We have said already, that this Fever had both the last year, and especially this, a certain Exacerbation daily about Night, not much unlike the Fit of an intermittent Fever. Wherefore those Physicians that had found by Experience that all those Fevers, which did any whit intermit (and oft those that did not intermit at all) through that Series of Years, from Seventy seven to the beginning of Eighty five, were certainly cured by the *Peruvian Bark*, treated this Fever with the same Remedy: But tho' it was reasonable, yet most commonly it did not succeed so well as in former Years. For upon a diligent Search I found, that tho' a great quantity of the Bark was given, yet it rarely cured the Sick, and so very rarely, that I rather impute the recovery of the Patient to some lucky event of the Disease, than to the Virtue of the Bark, so that it wholly lost that curing Virtue and Certainty it had in the foresaid years: I mean the Fever we treat off now, which is something like a Quotidian; but when there is a Type of a genuine Tertian, or of one invading every other day, the Bark is as effectual at this time as ever; so that it is very evident, that this Fever was quite different from that of the former Constitution, for as much as the use of the Bark does now no good, and this is heightened by Wine, Cordials, and other hot things; all which well enough agreed with the use of the Bark, and also with that Fever.

Moreover we must observe, that this Fever raging all the Summer, especially that of this year, the Disease did often shew it self, not so much by the *Pathognomonick* Signs of a Fever, viz. by Heat and Inquietude; as by Gripes sometimes dry, and sometimes loose, yet notwithstanding the Fever of this Season lurked under this Disguise, in which the inflammatory Exhalations of the Blood were not, as is usual, protruded to the habit of the Body, but put off inwardly by the *Mesenterick* Arteries, upon the *Viscera* of the lower Belly, and sometimes upon the Stomach by the Branches of the *Celiac* Arteries, which Exhalations are wont to provoke vomiting, especially presently after taking Drink, or any more solid Nourishment. Yet tho' this Fever lurked under the form of the foresaid Symptoms, yet it was to be cured by the genuine Method, we delivered above, in the same manner

ner as if it had appeared in its own colours, *viz.* by bleeding and repeated Purges; only it is to be observed, that when the Fever does so much molest the Stomach, that it cannot retain a Potion, then the Pill of *Coeb. Major* (of which two Scruples prescribed do always pass through the Body) may be substituted in the room of a gentle purging Potion; but the Pills must be taken at four in the Morning, that the Patient may sleep after them, and then an *Anodyne* in a large Dose is to be allowed, *viz.* a Grain and an half of solid *London Laudanum*, with the like quantity of Mastic made into two Pills, to be taken the same Night; or eighteen or twenty drops of *Liquid Laudanum*, in an Ounce of Cinnamon-water hordeated, or any other generous Vehicle, by which means the Stomach being both strengthened, and not irritated by the small quantity, may not cast up the Remedy: But if the purging Potion, and *Diacodium* can possibly be retained in the Stomach, they are wholly to be preferred before the above-mentioned Pills, and *Laudanum*, for they perform their business without heating the Body so much as the Pills.

But seeing I have mentioned the Gripes, I will admonish my Acquaintance with how much danger, as I have frequently observed, Mineral Waters are wont to be prescribed in any Gripes whatever, or Looseness, or Vomiting, or any other Disease whatever, that takes its rise from a Fever; for as much as so subtil and spiritual kind of Disease, as 'tis evident a Fever is, Mineral Remedies do so confound all things, that instead of the Symptoms which were wont to accompany a Fever, they introduce Accidents altogether irregular, yet in the mean time do not at all assist towards eradicating of the Fever, which I have long and often observed.

But this must be carefully minded, for as much as it may serve to deliver many from the Jaws of Death, *viz.* that notwithstanding what we have said before, when the above-mentioned Gripes rise to be a confirmed *Dysentery*, in which besides the Gripes, some Mucous Matter together with Blood is voided by Stool; it is manifestly very dangerous to treat the Disease with that tedious Method, which orders Evacuations first, and afterwards those things that attemperate the sharp Humours

(to say nothing of astringent Medicines of various kinds and forms taken inwardly, and Glisters sometimes astringent, sometimes consolidating, now and then injected) for I have found by experience, that a *Dysentery* is most certainly and most speedily cured, if without any more ado, the Flux be presently stopt by *Laudanum*; for this Disease is so very violent and fierce, that if you go on in purging, when the *Dysentery* is confirmed, there is great danger, lest it being heightened by this means, should by reason of its incredible Ferment, torment the Patient longer, do afterwards what you can, or perhaps kill him. Therefore being called, I presently give him about twenty two Drops of *Liquid Laudanum* in *Epidemick Water*, or in *Aqua Mirabilis*, or the like, to be repeated twice in the space of twenty four Hours, or oftener at set times, if the Dose prescribed to be used, only Morning and Evening, be not sufficient to quell the Gripes, and the Bloody Stools. The Excrement being a little thickened, or of a better Consistence (which is the first sign of recovery) and the Symptoms being vanquished, I suppose it is safest for the Patient to continue for some time in the use of the foresaid Medicine. Morning and Evening, taking some Drops daily, till there be no further occasion. But it is to be observed, that I order the Sick to keep his Bed longer after the use of the *Anodyne*, for any erect Posture soon disturbs the Head, unless the Patient sleep long enough after it. As to Diet, if the Sick has been accustomed before to Wine, I allow him Canary, but well diluted with Water, in which a Crust of Bread has been boiled, which I order to be kept cold for this use in a stone Bottle, that it may be in readiness when the Wine is to be attemperated. Also the white Decoction of burnt *Hartshorn* in Fountain-water, drank freely, is profitable; Barly, or Chicken-broth, or a poached Egg, or any thing else of easie Digestion, may suffice for Food on the first Days: But afterwards we must rise by degrees to more generous Liquors, and to a more plentiful and solid Nourishment, lest too great a Vacuity should produce again the same Disease, the Patient recovered of, or some other Symptoms that are produced by Emptiness. But we must observe this, that tho' *Laudanum* alone did subjugate *Dysenteries* of this

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Constitution, yet in those years in which they are Epidemick, and exceed other Diseases, it will not be improper to use those Evacuations first, which were heretofore described in the Chapter of a *Dysentery*.

And as in that confirmed *Dysentery* now spoke of, so in this Case that follows, it cannot be, that the Cure should be presently expedited by that Method, which is proper for the Fever, from whence it first took its rise. For instance, sometimes it is so, that the Sick being seized with a Horror and Rigor, (Heat and Cold succeeding one another by turns, which are the certain Signs of an imminent Fever) is of a sudden miserably afflicted with the Gripes, by reason the Febrile Matter rushes in upon the Guts: And whereas he ought to be purged and blooded, as is above-mentioned, presently he betakes himself to hot Medicines taken inwardly, and outwardly applied, to the intent he may expel the Wind, which he supposes to be the Cause of his Misery, till at length the Pain increasing, and being as it were impacted into his Bowels by long continuance, the *Peristaltick* Motion (by which, according to the Law of Nature, all things should be conveyed downwards) begins to be inverted, and all things tend upwards, and the Patient is grievously tormented, and provoked to vomit, the Disease now ending in an *Iliac Passion*. In this Case the Physician, can proceed no further in the Method of Cure; which the Fever, the antecedent Cause of this Symptom, required, than to order bleeding in the Arm for once: For how many, and whatsoever *Catharticks* you prescribe, will presently become *Emetick*, and so the more promote the inverted Motion of the Bowels; for as much as the strongest purging Medicines, or indeed the least part of them, can scarce pass the Guts, and cause a Stool. In this Case I think it is most adviseable first to bleed in the Arm, and an Hour or two after, to inject a strong Glister. I reckon the smoak of Tobacco, strongly blown up through a large Bladder into the Intestines by a Pipe inverted, to be the best, and most effectual Glister I know, which may be repeated a little while after, unless the former, by giving a Stool, open the Passage downwards. But this Symptom being not totally conquered by this Remedy, it is necessary, that a *Cathartick*

that tick somewhat stronger, be used, how difficult soever it be to make way.

Take of the Pill Ex duobus thirty five Grains, Mercurius dulcis one Scruple, make four Pills with a sufficient quantity of the Balsam of Peru, take them in a Spoonful of Syrup of Violets.

Drink no Liquor upon them, lest they should not be retained; but if the Sick should vomit this Remedy, we must proceed in this manner: Let him take presently twenty five Drops of *Liquid Laudanum* in half an Ounce of strong Cinnamon-water, and after a few hours let it be repeated; but when the vomiting and Pain of the Belly are abated by the use of these, then the foresaid Purge may be repeated again; for at this time it will be retained under the Protection of the *Laudanum*, and will at length perform its business; but if the Vomiting and Pain should return again, by reason the Virtue of the *Anodyne* is wholly decayed, and the Purge should stop in the Body, in this Case, all Hopes from Stools being at present laid aside, we must return to the use of the *Anodyne* before described, which must be repeated every fourth or sixth hour, till the Guts be wholly quiet, and the natural Motion downwards be restored, at which time the Purge which has been hitherto stop in the Body, by reason of the contrary Motion of the Guts, will now operate by Stool; tho' because of the *Narcotick* so often repeated, a quite contrary effect may seem to follow, which I have just now experienced in a Gentleman, tormented with a very severe *Iliac Passion*, who had afterwards *Aphebe* by reason of too long retention of the Humours, that occasioned the Disease, and of sharp Purges; but they were easily cured by the use of the *Peruvian Bark* above described, and by washing the Mouth often with the following *Gargarism*.

Take of Verjuice half a Pint, of Syrup of Raspberries one Ounce; make a Gargarism.

But when these Passages are open again, as much as they should be, the Patient may forbear purging for some days,

days, till the Tumult raised of late in the Bowels be wholly ceased, which space of time may conveniently enough be allowed for diluting, and attemperating the Heat and *Acrimony* of the Humours, which being performed, he must purge every other day as before, if the least Footsteps of the Fever remain; but of this enough.

If a Child has this Fever, two Leeches must be applied behind each Ear, and a Blister to the Neck, and it must be purged with Beer, wherein *Rhubarb* has been infused; if after purging the Fever seems to remit, then the Julep must be given of the Jesuits-Bark, set down for Infants in the Chapter of an intermitting Fever.

Moreover it is to be observed, that tho' Children are equally subject to this sort of Fever with the adult, and that therefore they are to be cured by the same Method, only the quantity of Blood taken away, ought to be lessened, with respect to their Age, and purging ought to be accommodated to it, and perhaps not so often to be used; for the Diseases of Infants and young People will be often tamed by the first or second Purge: Yet we must seriously consider, whether the Fever treated after this manner, certainly belong to this Constitution, or to another kind, which ought seriously to be minded in those Fevers that seize Infants in all Constitutions of Years; for it is commonly known, that Children are frequently seized with Fevers, arising from their breeding Teeth, which are not easily distinguished from Fevers of another kind. I have been in great doubt a long while about the Cure of these, neither could I be certainly persuaded but of late, that any committed to my Care, were recovered so much by Art as by Chance; till at length being often admonished of the happy success of a Remedy, that is not very famous, yea indeed very contemptible, upon the account of the common use of it; I had also prescribed it, which answered my Desire better than any I know; it is three or four Drops of Spirit of *Horseshorn* according to the Age, given in a Spoonful or two of *Black-Cherry-Water*, or of any other proper Julep, four or six times, once every fourth hour.

There is another Symptom that very much troubles Infants, which is very different from the Fevers, of various

rious Constitutions of the Years, and from that last mentioned : It is a sort of *Heſtick* that afflicts a long time, and thoſe that are troubled with it languish without any conſiderable Heat, with a loſs of Appetite and a waſting every where, both of the Member, and Trunk of the Body. I uſe this ſimple Method following :

Take of choice Rhubarb ſhred two Drams, let it be put into a Glaſs Bottle, containing a Quart of Small Beer, well ſtopp'd, or any other Liquor the Child uſually drinks of, which medicated Beer I order to be taken both in the Day and Night, and at Meals, which being drunk up, I order a Quart more to be put upon the ſame Rhubarb, which alſo being drank off, a Quart more is to be put upon it as before ; after which the Rhubarb commonly loſes its Vertue, and the Child recovers ; But leſt the Beer firſt put on, ſhould be too much impregnated with the purging quality of the Rhubarb, and ſo purge too much, it will be better to add another Pint preſently after the firſt is drunk up ; but afterwards freſh Beer is not to be added, till the whole Bottle be drunk.

But to return to the Fever we now treat of, *viz.* of the preſent Conſtitution, we muſt diligently obſerve, that in this kind of Fever (as in a Rheumatism, and many other Diſeaſes, whoſe Cure is performed only by Evacuations) if we obſtinately inſiſt on the above named Evacuations, till the Symptoms wholly ceaſe, the Sick will often be deſtroyed ; for it is not very unuſual that ſome ſlight Symptoms, as it were the Relicks of the feeble Fever, remain a while after the Diſeaſe is gone off, yet a Relapſe is not to be feared from thence, they retiring gradually, as Health returns ; for theſe Symptoms are commonly nothing elſe, but the true Progeny of theſe Evacuations, by which the Phyſician endeavoured to cure the Diſeaſe : If this at leaſt be added, as partly the cauſe, *viz.* the Emptineſs, that the Abſtinence of the Patient from his wonted Meals, and Drink, has occaſioned : All which, when they fall upon Bodies weakened, and almoſt worn out by the Diſeaſe, raiſe Vapours as they ſay, as in Women ; and for the ſame reaſon, on the account of the weakned, dejected, and broken System

System of the Animal Spirits : Wherefore having made those Evacuations, that are sufficient for taking off the Disease, it is the Duty of a prudent Physician to forbear the unseasonable administration of them, and to wait a while on time, often the best and most successful Physician, for the taking off those light Symptoms, which truly, as I have often observed, go off at the latter end of such a Disease, without any more ado, by an *Anodyne* taken at Bed time for two or three Nights.

The Method now delivered much exceeds all I have cryed in the Cure of this Fever; and if at any time it does not take it off, yet it forces it to intermit, and then it is always cured by the Jesuits-bark : But whereas purging ordered for the Cure of this Fever, may perchance seem hurtful to some, I assert, that upon Tryal, nothing so certainly, and so powerfully cools the Patient, as purging prescribed after bleeding ; which must be always used. First, for tho' a Purge does for the present raise a greater Tumult in the Blood, and other Humours on the day it is taken, and in the Operation, than was before, yet that Injury will be sufficiently made up by the advantage that presently follows ; for it is found by Experience, that purging after bleeding quells a Fever sooner and better than any other Remedy whatever, both as it excels that filthy Humour from the Body, by which, as the antecedent Cause, the Fever was occasioned ; and if they were not peccant before, yet at length being heated, concocted and thickened by the Fever, do much to render it more lasting : And also, as it makes way for a *Paregorick*, which performs its business safer, and much sooner, than if the peccant Humours, which might otherwise hinder the force of the *Anodyne*, were not eliminated by purging.

But on the contrary, as that Method which is busied in eliminating the Febrile matter through the Pores of the Skin is less certain, so it is more troublesome and tedious ; for by it the Disease is very often protracted many Weeks, and the Sick is brought by this means to the brink of the Grave ; and if he chance at length to escape Death, he is plagued with a crowd of Remedies all the long course of the Disease, to take off these Symptoms, which the ill Management of the Disease brought on,
when

when the Cure of it is endeavoured by the hottest Method and Remedies, which according to its own Genius wholly requires the coolest of both; and so while Brain-sick Men inslave themselves to Rules of Art, falsely so called, and despise the Judgment of their very Senses, informing them better, they learnedly convert a Disease, of its own Nature short and easie, into a lasting and difficult one, confounding all things through Tumult and Fear, and raising, as they say, waves in a Cup; upon which account there is no more need of them, than for a Pilot, who when he may sail in the open Sea, steers the Ship among Rocks and Shelves; from whence, tho' he may gain an opportunity of acquiring Fame by his great Skill, in preserving the Ship in so great danger, yet certainly he will be reckoned an imprudent Man.

And for these Reasons I can, I trust, assert upon good Grounds, that the above-mentioned method of Cure by Bleeding and Purging, is more powerful than any other, for the subduing Fevers of most kinds; for tho' Sweating, to speak properly, is Nature's own method by which she casts out the Febrile Matter, and is more Genuine and Commodious than the rest, when Nature is left to it self, it first digests the aforesaid Matter, and then when it is well concocted, gently expels it through the habit of the Body; which happy event of Nature, of curing Fevers by Sweating, when practical Physicians had often observed, the Dogmatical took occasion from thence of making this Rule, That all Fevers may, and ought to be cured by this method alone, and no other: But if we should grant this, yet Art, how much soever it may seem to imitate Nature, cannot arrogate to it self this privilege, that it is able to cure Fevers certainly by Sweating. For first, Art knows not by what means the peccant Matter should be fitly prepared to undergo Expulsion, and if it should know this, yet it has no certain Signs by which it may be admonished of the due Preparation of it: So that also it is unavoidably ignorant of the fit time of provoking Sweat. And I suppose no one, if he be not very obstinate, will deny that it is very dangerous to provoke Sweat rashly, before a due Concoction, for by forcing the crude Matter upon the Brain, it adds Oyl to the flame, and as I have hinted

in another place, the wholsome Advice of *Hippocrates*, (*viz.* that things concocted, not crude, are to be medicated) does not seem to respect so much Purging, as Sweat forced by Art. For no one that is but indifferently acquainted with the Practice of Physick can be ignorant, how many are dangerously hurt by old Women and Quacks, by this preposterous use of *Sudorificks*; for it's customary with these, if any one complains of shivering, and a pain of the Head and Bones, which are most commonly the Fore-runners of a Fever, presently to put them to Bed, and do all they can to force them to Sweat. By which unseasonable endeavours, they are so far from preventing the Fever, which perchance would go off of its own accord, or by letting some Blood; that on the contrary it is the more heightened, and becomes a confirmed and radicated Disease. This is moreover to be observed, to say no more of old Women, that as those Sweats that come at the beginning of the Fever are altogether Symptomatical, not critical, so those that are forced at the beginning of the Fever by *Diaphoreticks*, most commonly conduce no more to the cure of it, than the other Symptomatical Sweats that flow so early of their own accord are wont to do, that is, most commonly not at all: And then as Art is ignorant of the due time for promoting Sweat, so likewise knows not how long it should persevere in forcing them: For if Sweats are continued beyond the due time, by which the Matter occasioning the Disease is wholly expelled, a Consumption of these humid Particles, with which the Blood should be diluted and attemperated, will make the Fever continue longer and heighten it. It is evident therefore, how uncertain this method is, whereas on the contrary, it is in the Physicians power to moderate the other as he please, in which the Febrile Matter is eliminated by bleeding and purging. Moreover, this is to be preferred before the other on this account, *viz.* that if the Physician should miss his Aim in curing the Patient, yet he will not hurt him, which is otherwise in the use of *Diaphoreticks*, unless he recover; for the heat of one that is kept continually in Bed, to which he has addicted himself for some time, contrary to his Custom, (to say nothing of Cordials, which are always used in this way

way of Cure) confounds the Oeconomy of Nature, and causes Convulsions of the Members, and other irregular Symptoms, which cannot therefore be described, because they do not belong to the History of this Disease (which is common in many Symptoms, respecting all Diseases) but take their rise from the Convulsion and Tumult that are unnecessarily occasioned; by which Nature is often oppressed, when we carry on the Cure of this Disease by this method; all which are wont to be imputed commonly to I know not what Malignity.

The invention of which Opinion concerning Malignity either as to the Name, or Notion of it, has been much more destructive to mankind, than even that of Gunpowder: for as much as these Fevers are chiefly said to be malignant, in which the Inflammation is higher than in others; and for that reason Physicians have betook themselves to Cordials, and *Alexipharmicks*, to the end they may expel through the Pores of the Skin, the Poyson they dream of (for so it must be called, unless they had rather trifle about words, than propose seriously, that which may be understood) upon which account they have prescribed the hottest Remedies, and method for those Diseases, which required above others the coldest Remedies and *Regimen*, is evident enough both in the Small-pox (which is one of the hottest Diseases in Nature) and in the Cure of other Fevers: Into which Error perchance they were led, by seeing the *Petechie*, and purple Spots, and other *Phænomena* of the same kind, all which owe their rise in most Subjects to an Inflammation super-induced upon the Blood of the Sick, too much fired by the Fever already: For as much as they rarely happen, except at the beginning of the Plague, and of those Flux Small-pox, that participate of the highest Inflammation: For in this kind of Disease, the livid Spots appear in various parts of the Body, together with the Pustles, when they first come out, and the Sick will be troubled with an Excretion of Blood, either by the Urinary passages, or by the Lungs with a Cough; when the Blood rages with such a violent Motion and Fury, caused by the Inflammation, that having broke through all, it rushes into the Cavities of the Body. And tho' the purple Spots in this Fever do not take their

rise from such an intense heat of the Blood, as that which causes such *Hæmorrhages*, yet notwithstanding they are produced by the same Inflammation, tho' in a less degree, and when there is not that Excretion of Blood, they are easily taken off by a cooling *Regimen*. But if they conjecture there is Malignity in the Case, not only from the purple Spots, but also because they have observed, that the Symptoms of the Fever have been sometimes milder than may seem to agree with the Nature of it, and yet that the Patient was more weakened than could be expected in the time he has been ill: I answer, that all these things proceed only from hence, *viz.* For that Nature being as it were oppressed, and vanquished by the first assault of the Disease, is not able to raise regular Symptoms, and such as are agreeable to the Greatness of the Disease, but all the *Phænomena* are wholly irregular; for the Animal Oeconomy being disturbed, and as it were dejected, the Fever on that account is depressed, which according to the genuine Course of Nature used to be high. Of which, I remember, I saw a notable Experiment many years ago, in a young Man to whom I was called; for tho' he seemed almost dying, yet the heat in the external parts of the Body felt so temperate upon touching, that the Standers-by would not believe me, when I affirmed, he had a Fever, which by reason of the Oppression of the Blood (by whose bulk it was kept in, and as it were choaked) could not extricate and shew it self openly: But that if they let him Blood they should presently perceive the Fever high enough; a Vein being opened, and a pretty deal of Blood taken away, the Fever broke out, which was as violent as any I ever saw, and did not go off, till Bleeding had been used three or four times.

But if the Arguments I have produced are not so considerable, as to prove the thing certainly to be, as I say, yet if I find by Experience, that this Fever does not go off easily by Evacuations, made by Sweats, I have what I seek for; for no Man can tell by arguing, but by experience, what kind of Fever can, and ought to be cured by Sweats, and what by other Evacuations. And truly no wise Man, who has sufficiently considered the Nature of Men and things, can implicitly believe the Opinion of any Man, how great soever he be, concerning those things that are meer Spe-

Speculations, and cannot be determined by any certain Experiment; for he ought to consider, that the moments of reason are so very various and subtle, that when any one has proposed a Speculation, so established by firm Reasons, that he forces the Assent of all that are near him; presently another succeeds him, endowed perchance with better parts, who considers that Opinion which was so fairly settled, and clearly proves by a stronger force of Argument, that that was nothing but a Fiction of the Brain, for as much as not the least Footsteps of it are to be found in Nature; and in the room of it substitutes a certain new *Hypothesis* more probable than the former, and more nearly contrived, yet this latter Fiction undergoes the same fate with the former, when some third Person opposes, who as much exceeds the second in Ingenuity as he did the first; and so there will be no end, till at length we come to him, who is arrived at the top of humane Ingenuity; and how hard it is to find this Man, and to know him from others, any one will presently perceive, who is not so very mad as to arrogate this Praise to himself. For as we may conjecture, that there are almost infinite Natures in the illustrious Orbs, here and there scattered through the Firmament of the Universe, endowed with far more excellent Understandings than weak Man; so we do not certainly know whether mankind's Brain, the Shop of the Thoughts, be not so formed by Nature, that they cannot find so well what is absolutely true, as what is most convenient and suitable to their Natures. And so much may be sufficient to be spoken to those, who in Physick trust more to vain Speculations than to Experience, built upon the Testimony of the Senses.

But if any one should here object, and say, Do not we see *de facto*, that this Fever is very often cured by a method quite contrary to this you deliver? I answer, That the Cure of the Disease, which only the recovery of a Patient now and then witnesses for, wholly differs from the cure of the same, by that method of Practice, which is confirmed by more Recoveries of the Sick, and all other practical *Phænomena*, that happen in the cure of it. For instance, in the Small-pox, many who have been tormented with the cruel use of a hot *Regimen* and Remedies, have yet recovered; and on the contrary, they have done very well, whose Cure has been performed

by a method quite contrary. Now how shall we end this strife, which method is to be preferred? Why truly, by this means we shall certainly judge: Namely, if I have found in the former method, that the more I have heated the Sick, the more I have raised and promoted the Fever, Restlessness, the *Delirium*, and other Symptoms: And on the contrary, if it appears, that when he has been moderately cooled, his Temperament is so much the more sedate, and he is less vexed with the Fever, and other Symptoms: Moreover, that by keeping the due Temper of the Muscular Parts, which best suits with the increase, and Maturation of the Pustles, they are bigger and more filled, than if the Patient were suffocated with too great a heat. The Case being thus stated, I suppose it is evident enough, which method of Practice we ought rather to follow. In like manner, if I find in the Fever I now treat of, that the more the Sick is heated, the more he is inclined, not only to a Frensie, purple Spots, *Petechiæ*, and the like; but that it is moreover on that account, encompassed with irregular and enormous Symptoms of all sorts; and on the other hand, if I observe another Patient treated by the method we now propose, wholly freed from these Symptoms, Reason dictates that the latter method of Practice, is much to be preferred before the other, tho' both Patients recover by such different means: But if more escape Death by this way than the other, the Intricacy of the Controversie is so much the easier found out: But I must not judge of this, lest I should favour my own Opinion too much.

And so much for this kind of Fever; how long it will continue I know not; I am apt to believe, that it is some spiritous and subtle beginning of that Depuratory Fever which is now antiquated, and which the dreadful Plague followed. There are indeed some *Phænomena*, which somewhat induce me to believe this; for not only intermitting Fevers properly so called, especially Quartans, still remain here and there, but also some of these continual Fevers turned to Agues sometimes, especially this Autumn, to say nothing of the Exacerbations in this Fever mentioned above, that resemble in some manner the Fits of Agues. Moreover, for that those that have this Disease,

ease, are very inclinable to Vomiting, yet I do not pretend to any certainty in this matter, because I do not know after what manner the Depuratory Fever began, as I said in my Book of acute Diseases, *Sect. 1st. Chap. 3d.* in these words: But how long the foresaid continual Fever has prevailed, I cannot tell; for it has been enough for me hitherto to attend on the general Symptoms of Fevers; because I do not as yet understand how to distinguish them according to the various Dispositions of years, or the various Seasons of the same year.

Of the Putrid Fever coming upon the Flux-Pox.

SEeing my old and declining Age, and the Diseases with which I have so long conflicted, may not perchance afford hereafter an opportunity to publish some late Observations, that I have made (tho' too late in my Life) concerning the Secondary Fever, that comes upon the Flux-pox, I suppose it will not be amiss to add them here, though they no whit relate to the Disease I have now been treating of.

I have long ago shewn in another place, how great the difference is between the distinct and confluent Small-pox; to wit, in this, that he that has the distinct kind, scarce wants the help of Physick, and grows well of his own accord, by the assistance of Nature, unless he chance to indulge Sweat continually in Bed, from the beginning: For as I have noted elsewhere heretofore, he that has the distinct Small-pox promises much to himself, when he sweats freely; for he hopes that by this means the Venom of the Disease will be expelled thro' the Pores of the Skin, and therefore thinks it highly reasonable to promote the Sweat, as much as possibly he can by Cordials, and a hot *Regimen*: And he is the more encouraged to proceed in this method, because at first he fancies some relief by it, and besides it is agreeable to the erroneous Opinion of the Standers-by; but at length those Particles being Eliminated by Sweat, which should have served to elevate the Pustles, and to swell the Face, on the Eighth day, the Face which ought

to have been swelled, and inflamed between the Pustles, on the contrary appears flaccid, and white: Yet the Pustles continue red and elevated, even when the Patient is dead; and the Sweat which flowed freely to this day, now ceases on a sudden of its own accord, neither can it be raised again by the hottest Cordials. The Sick is taken Light-headed of a sudden; with Anxiety, violent Sicknes, and Restlessness: He makes water often, but little at a time, and in the space of a very few hours, frustrates the Expectation of his Friends, and repairs to his long home. Whereas this very Person had recovered without any danger of Life, if he had only committed the Matter to Nature, without putting himself under any other *Regimen*.

But in the Flux-pox the Case is very different: For tho' these (unless Eruption of Blood, through the Lungs, or Urinary-passages, happen at the beginning) neither terrifie the By-standers, nor bring the Sick into any danger of Life, for the first days of the Disease; yet afterwards in those days towards the end of the Disease, in which I have heretofore warned you, that the Patient was in the greatest danger, he is suddenly reduced to such Streights, that it is equally uncertain, whether he will live or die.

In the number of these I reckon the Eleventh, (if you compute from the first approach of the Disease) to wit, in the least crude, but most common sort of Flux-pox; the Fourteenth in the cruder; but the Seventeenth in the crudest sort, which are every where obvious, tho' sometimes, but rarely, the Patient does not die before the Twenty first day; the Pustles being so dry and crusted to that time, and as it were so impacted into the flesh, especially in the Face, that they by no means can be brought to Separation. But on the Eleventh day, the Patient most commonly seems first to be endangered, a violent Fever, Restlessness, and other Symptoms invading together; which betoken that Death is near at hand, by which the Patient is most commonly conquered, if he be not succoured by Art: But if he be not vanquished by the Disease on this day, the two latter which we have mentioned, are yet to be feared: For all the time between the Eleventh day, and the Seventeenth he

is daily vexed with a tiresome Fit of Restlessness towards Evening ; and Death is egged on, *Vi & Argui*. Moreover I have shewn, that this is the cause of the greater or lesser impending danger, in these kind of Small-pox ; to wit, for that in the distinct sort, the *Phlegmons* or Tumours, with Inflammation (of which sort are Pustles, when they are first elevated) are fewer, and by consequence but a small quantity of *Pus* is conveyed into the Blood, in its circular Motion, when they begin to ripen : and so there is no fear upon this account, that the Fever should rise too high, for Nature is easily able to restrain the impressions made upon the Blood by so small a quantity of Matter : But when in the Flux sort the whole Body is covered with *Phlegmons*, which afterwards turn into so many Abscesses, so great a quantity of Matter, in the days before mentioned (in which the Pustles by the guidance of Nature, for the most part obtain their height, or just Maturity) is brought by the Veins into the Blood ; and also so great a quantity of putrid Vapours creeps into it, from the whole Superficies of the Body, now, as it were, suppurated every where ; so that the Fever occasioned by this means, wholly oppresses the strength of Nature, and so at length the Patient is destroyed : Partly by the Fever, and partly by the Venom which infects the Mass of Blood. Wherefore, seeing the safety of the Patient depends so much on the Paucity of the Small-pox, and danger on the contrary, from the fulness of them, Reason dictates, and also Sense, which is common to all ; that therefore it is the Duty of a skilful Physician, not violently to drive out the variolous Matter, at the beginning of the Disease by hot Cordials, and a hot *Regimen*, by which means there would be too great an Assimilation of the *Morbifick* Matter contained in the Blood, and the whole Substance of the Body would be turned, as it were, to a Fomes of the Disease ; but he should rather use his utmost Endeavours in suppressing so enormous and subtile an Inflammation : To wit, above all by taking Blood from the Arm, if there be the least Suspicion (either because the Patient is in the flower of his Age, or because the Blood has been inflamed by strong Liquors, or upon account of violent Pains of some part of the Body ; or

Lastly

Lastly, from vehement Vomiting) that the Small-pox just a coming out, will Flux; and afterwards a Vomir is proper for the same. And seeing nothing heats the Patient so much, and for that cause so much promotes too copious an Assimilation of the various Matter, as the Patient's lying continually in Bed, I always keep him from it a days, till the Sixth day from the first Invasion, or the fourth from the Eruption of the Pustles; at which time the whole Troop of them are come out. Afterwards I commit him to Bed, till the end of the Disease; But I do not allow he should have more or thicker Cloaths on, or Fire in his Chamber, than he used to have when he was well: In the mean while I permit him the free use of Small-beer, and other cooling Liquors, which are most grateful to the Patient. But for as much as notwithstanding, even in the most temperate *Regimen*, the Patient will frequently fall into Heats, *Deliriums*, and Restlessness, I prescribe an *Anodyne* every Night, but a little earlier than is usual, because in this Disease there is, as it were, a certain Paroxysm, or Exacerbation of Heat and Restlessness, almost daily about Evening. This method now delivered, is most commodious, both to prevent a great number of Small-pox, (from whence the Patient is in greatest danger, as I have mentioned above) and also to further their increase, now they are all come out, and afterwards their due Maturation.

But (which is truly to be lamented, for as much as they who are in the flower of their Age, chiefly die of this Disease) the Patient is very often seized with a violent Fever, together with Suffocation and great Restlessness, on the Eleventh day, as is usual, or some other of those days, which I have reckoned most fatal in various kinds of Flux-pox (tho' till then he may be in no great danger) and contrary to expectation, dies suddenly; both these aids which we have mentioned before, and all others, which the medical Art has hitherto found out, signify nothing, his Friends being wonderfully astonished, who just before had great hopes of his Recovery. The Physician will labour earnestly to vanquish this sudden *empetus* of the Disease, when before he has done all he could to prevent it; in order to which

which it must seriously be considered, that the adventitious Fever, which on the Eleventh day seizes those that have the Flux-pox, is a Disease quite different from the Small-pox, and that Fever which either preceded the Eruption of them, or is sometimes occasioned by the Inflammation of the *Phlegmons*, on the first days: For it is no other than a putrid Fever properly so called, taking its rise from putrefying Particles, and poysonous Pustles, now come to Maturity, and, as I said, sucked again into the Blood; by whose noxious, and inimical quality to Nature, the Patient is at the same time poysoned, and molested with the worst of Fevers. Wherefore every prudent Man will suppose, that only those things are proper Remedies in this Case, which are most powerful in subduing this Secondary Fever, which I call putrid; but nothing does this business more effectually than large Bleeding, by which means the vitious Particles that are the Fomes of the Disease, are banished from the Blood. Neither does the Small-pox, if I am able to judge, considering the State they are now in, any whit oppose this Practice; for the Pustles cannot be struck in by any means: For if the Patient should die at this time of the Disease, and the Body laid in the cold Earth; yet the Pustles being crufted so hard, could neither retreat with the Skin, nor be lessened in bulk; and truly, we have not now to do with the Small-pox, but wholly with another Disease, *viz.* a putrid Fever. And for these Reasons I have used successfully the following method, which I have found since I published my last Observations of the Small-pox; and truly except this I know no other, neither can I imagine by what means the Patient can be so certainly relieved: Therefore when he is reduced to such Streights, that by reason of the unusual violence of the Symptoms, he seems just about to expire, unless he be presently relieved, in this Case I say, whether it be the Eleventh day, or some other after it, ten or twelve Ounces of Blood is presently to be taken away from that Arm, in which the Pustles being fewest, the Vein is most commodiously opened: For tho' *Paregoricks*, and keeping from Bed a-days, may suffice without letting blood, at the beginning of the Disease, to quell the Fury and Paroxism, which most commonly

monly invades in the Evening, yet in these days of the Secondary Fever, we cannot safely trust in any thing else but large Bleeding, by which alone the Fury, at this time raging, may be safely quieted ; at Evening an *Anodyne* is to be taken, as before, in a large Dose (to which we now fly as to a Sanctuary) and so afterwards Morning and Evening, and sometimes oftner : For we must diligently observe, that in some the Fury is so heightened above measure, that even a very large Dose of the *Anodyne* cannot tame, nor indeed stop its violence, before the space of twelve hours ; in which case it is absolutely necessary, that the said Dose be repeated every Eighth or Sixth hour.

And whereas it often happens at the latter end of the Disease, partly from the Nature of it, and partly from the great force of the *Anodyne*, whose help the method of Cure plainly required, that the Patients Body is so bound, that then he is almost suffocated, and the Fever so heightened, that he is in a desperate Condition ; in this difficulty we must use a suitable Remedy : And the Case standing thus, there is much less danger to the Patient in taking a Lenitive Purge, than from the Fever, much heightened by the Retention of the Excrements. I have prescribed very successfully one Ounce and an half of *Lenitive Electuary*, dissolved in four Ounces of some small distilled water ; for instance, of *Cichory*, or *Aqua Lactis Alexit*. Which draught, tho' it may not operate so soon as it is wont, by reason the Belly is usually bound in this Disease, as also upon the account of the long use of *Hypnoticks*, yet if it be given in the Morning, it most commonly works before Night ; but if it does not, yet the *Paregorick* is to be given in the Evening ; and indeed sooner, notwithstanding the Purge, if great Inquietude, or some considerable Sicknes threatens danger, lest the Patient, being destitute of this help, dies while we wait for the working of the Medicine. Neither will the Patient receive any damage from so gentle a Purge, if it do not work at all. If therefore it do not answer your Desires the first day, let it be repeated the day following, which assisting the former Dose, seldom fails the Physician. But if he suppose that it has purged away so much of the filth on the first day, as is sufficient for the

the present, and the Patient begins to be better afterwards, the other Dose may be deferred to another time. And after this manner, both bleeding and purging may be repeated by Intervals, as the Condition of the Fever, and the Restlessness of the Patient seem to require them, till at length he is out of danger: But as to purging I desire it may be seriously minded (lest the mentioning of it should do much more hurt than good) that the Patient is not to be purged, till the latter end of the Disease, viz. till the thirteenth day, or after; nor then unless the Blood were diminished, at the time when the Secondary Fever invaded.

But that I may use my utmost endeavour to finish Practice in this Disease; I will propose some few things concerning spitting of Blood, and of bloody Urine coming upon the Small-pox, both these *Hæmorrhages*, as I have noted heretofore, come at the beginning of the Disease, before the Pustles break out, or if they shew themselves in some places; yet in most other places they lie thick under the Skin, and are of that kind, which would Flux most, unless the said Symptom put an end to the Disease by the Death of the Patient, the Purple Spots in the mean while, besiege the Superficies of the Body, and threaten a dreadful Event. But tho' these Spots may be taken away by attemperating duly the Blood, yet both the bloody Urine, and the violent Eruption of Blood from the Lungs, were certainly wont to forerun Death. But this dreadful difficulty may be also overcome, and the Sick may be put out of danger. For this Symptom arising from a violent Inflammation of the Blood, and the Tenuity of it, those Remedies which attemperate the Blood, and also renders it less fluent, by their astringent, and thickening Virtue, stop these *Hæmorrhages* excellently well; wherefore after bleeding freely once, let a *Paregorick* be given: As,

Take Erratick Poppy-water two Ounces, of Liquid Laudanum sixteen Drops, of distilled Vinegar three Drams, of Diacodium half an Ounce. Mingle them and make a Draught.

After-

Afterwards the following, or the like must be prescribed.

Take of the Troches of Lemnian Earth, and of Bole-armenick, each one Dram, of sealed Earth, Blood-stone, Dragons-blood, and Red-coral prepared, each half a Dram, of Mastick, and Gum Arabick, each one Scruple. Mingle them, and make a fine Powder; let him take half a Dram every third hour, in one spoonful of Syrup of Comfrey, drinking upon it four or five spoonfuls of the following Julep.

Take of the Waters of Plantain, and Oak-buds, each three Ounces, of Cinnamon Water boyled two Ounces, of Syrup of dried Roses one Ounce, of Spirit of Vitriol a sufficient quantity, to make it a little acid.

In the meantime, give the Paregorick above described every Night.

Emulsions also of the four greater cold Seeds, with Seeds of white Poppies do a great deal of good.

But when the Hemorrhage ceases, all the rest must be managed through the Course of this Disease, as is proposed in the Chapter of the Small-pox.

Before I conclude, I will add this, viz. as often as I prescribe some Drops of *Liquid Laudanum*, I mean that *Laudanum* of my own Description, the Preparation of which is to be had in my Book of acute Diseases, in the Chapter of a *Dysentery*; and I would have that *Diacodium* which is made of fourteen Ounces of the Heads of white Poppies well dried, and (after Maceration for twenty four hours, in eight Pints of Fountain-water) sufficiently boyled, then very strongly expressed, and to the strained Liquor, are added twenty four Ounces of Sugar; and afterwards 'tis boyled to a Syrup: For I judge these two Preparations to be the best of their kind, especially the *Diacodium*, whereof one Ounce is more efficacious than two of the other; in which the Poppy-Heads are used green; the Liquor is not so strongly pressed out, and the black Heads of *Erratick* Poppies, which have little Virtue in them, make up so great a part.

There-

Therefore when I am not satisfied concerning the strength of either of these *Paregoricks*, instead of them I am wont to prescribe a Grain and a half, or two Grains of solid *London Laudanum*, dissolved in some proper water, by which means I secure my self from any mistake, and provide for the welfare of the Patient.

Of a Bloody-Urine from a Stone in the Kidneys.

THO' it may seem rash and imprudent to publish an Observation whereof I have had only Experience in my self, yet I suppose no just Person will be angry with me (who have been so much, and so long troubled with a Bloody-Urine occasioned by the Stone in the Kidneys) for commiserating those that are afflicted with the same Disease, and for discovering those Medicines that have eased me, tho' they are vulgar and of little esteem.

In the Year 1660, the Gout seiz'd me more violently, and continued longer than ever before, and when upon this account I lay continually for two Months in the Summer time, either in or upon a soft Bed; towards the latter end of the Fit I began to feel a dull and heavy Pain, especially in my left Kidney, and sometimes, tho' rarely, in my right, and when I recovered from the Gout, the Pain in the Kidneys remain'd, which made me fear the Stone, tho' the Pain was not at all acute, but tolerable enough; for I had not yet had a *Nephritic* Fit; which is accompanied with violent Pain, stretching it self through the passage of the *Ureters*, towards the Bladder, and with violent Vomiting. But tho' these Signs of the Stone in the Kidneys did not appear, yet I had good reason to believe, that I had a large Stone in the Kidneys, which did occasion the foresaid Symptoms, because it was too large to pass into the passage of the *Ureters*, and many years after I found I was not mistaken; for when in the Winter 1676, presently after the breaking of a violent Frost, I had walked much, and a long time, I immediately made water mixed with Blood, and so I did, as often as I walked much, or rode in a Coach in paved Streets, tho' the Horses went gently: But this did not befall me, how far soever I travelled in great Roads,
that

that are not paved; the Urine that I voided then, tho' it looked terrible, as I render it, almost like pure Blood, yet soon after it was limpid, and like it self at the top, the Blood clodding by it self at the bottom. For the cure of this Disease, I bled largely at the Arm, and after general Purges I used cooling, and incrassating Medicines, of various kinds, and a Diet agreeable to these things, and carefully avoided acid, acrid, and attenuating Liquors: But these and many other things, which it would be tedious to mention, doing no good, and fearing to provoke the Stone forward, which I suspected was too big to be expelled by Steel-waters; at length I left off all hopes of doing any good by them, and especially, because I had found that some old Men of my Acquaintance had hastened their end by attempting in vain, to cure this Disease by such Remedies; wherefore I resolved to try no further, only to prevent this Disease by avoiding as much as I could the Motion of the Body: But considering at length how wonderfully some praise the *Lithontriptick* Virtue of the Seed of the Ash-tree, I imagined that if the Seed of it had so much Virtue, it was very probable, that the *Manna* of the Ash should have much more, than as the excellent *Botanist*, Mr. Ray, and many other Writers say, nor being Aity Honey, or Heavenly Dew, but rather a Liquor sweating out of the Leaves, the Trunk, and the Branches of the Ash-trees in *Calabria*, the Truth whereof was confirmed to Mr. Ray when he travelled in *Italy*, by a Learned Physician, who often gathered *Manna* from the Branches and Leaves, when they were exactly covered with Linnen Cloaths. See Ray's Catalogue of English Plants. Therefore being about to make the Experiment, I drank two Ounces and an half of *Manna* dissolved in a quart of Whey; swallowing now and then a little of the juice of Limons, while I was Purging, to quicken it, which usually works slowly, and to make it more pleasant to the Stomach; it can scarce be imagined how much ease I received, about the Region of the Reins, by the use of this Remedy; for tho' before they did not always ake, yet they were affected with a heavy and troublesome Pain, and because the Success was so good, I took the same Purge on a set day once a Week, for some Months, and after every

every Purge I plainly found my self better, and could bear the shaking of a Coach, when it went fast, and was indeed quite freed from this Symptom till the last Spring, at the approach whereof, having been miserably afflicted with the Gout, all the foregoing Winter, and having lived without Exercise more than I used to do, by reason of my unfitness for Motion, the Bloody-Urine returned again, and now I doubted, whether I should betake my self again to Purging, because of late years, the whole Substance of my Body being turned as it were into the Fomes of the Gout, the gentlest Purge did most certainly occasion a Fit of the Gout. At length I considered, that if I gave an *Anodyne* every Night after purging to quell the Tumult, the Purge had raised, I might safely resume my old method of taking *Manna* once a Week; therefore in the Morning I took two Ounces and an half of *Manna* in a quart of Whey, and in the Evening sixteen Drops of *Liquid Laudanum*, in Small-beer, repeating the *Manna*, and *Laudanum*, in the said manner, twice a Week, for three Weeks; afterwards I used the *Manna* only once a Week, the filth of the Humours being so plentifully discharged by the Purge, that the Gout was not much to be feared, and my reason telling me, That if the *Manna* was indued with any Faculty, that is dissolving, or any other way *Lithontripick*, to be sure, the Virtue and Efficacy of the Remedy, I trusted in, wou'd be somewhat lessened, by such an Astringent Medicine as *Laudanum* is; and therefore I thought it best to omit the *Anodyne*, seeing I purged only once a week. I continued this method for some Months, always purging of the same day of the Week, nor would I break this Custom upon any account whatever, tho' the Pain of the Back abated after the first Dose of this Remedy, as formerly; yet soon after repeated Purges made the Gout appear, threatening War sometimes in the Limbs, and sometimes in the Bowels; but *Laudanum* strongly repressed these Motions of the Disease, and this method succeeding well hitherto, I thought I ought to continue it, both to prevent the return of the bloody Urine, and to lessen somewhat of the Matter that occasions the Stone, which answered according to my Desire. This bleeding vanishing from the time I first published this Treatise, and therefore I

quite left off the *Manna*; therefore as to purging, if there is a bloody Urine, and if *Manna* be only used according to the method above delivered, I must retract my Opinion, which I published concerning the Gout, viz. that it is no way fit, that People subject to the Gout should be purged, either at the Beginning, Declination, or the Intervals of the Fits.

--- *Nec si Miserum fortuna Sinonem*

Finxit, vanum etiam Mendacemque improba finger.

For then it did not come into my mind, that the Fit occasioned by the Purge could be restrained by giving an *Anodyne* at Night; yet with respect only to the Gout, all Evacuations do much hurt, and therefore are not to be admitted, unless the foresaid Symptom requires the use of them.

I will add these things concerning the *Regimen*, and manner of Diet, which seem proper for those that are troubled with either of these Diseases; for I would by no means pass by any thing, that may be of use to such as are afflicted with the same Disease as I am. In the Morning when I rise I drink a Dish or two of Tea, and then ride in my Coach till Noon; when I return home, I moderately refresh my self with any sort of Meat of easie Digestion that I like; (for moderation is necessary above all things.) I drink somewhat more than a quarter of a Pint of Canary-wine, presently after Dinner every day, to promote the Concoction of the Meat in my Stomach, and to drive the Gout from my Bowels. When I have dined, I betake my self to my Coach again, and when business will permit, I ride into the Country two or three Miles for good Air. A draught of Small-beer is to me instead of a Supper, and I take another draught when I am in Bed, and about to compose my self to sleep, that by this Julep I may cool and dilute the hot and acrid juices lodged in the Kidneys, whereby the Stone is occasioned; and I prefer at this time, and at Dinner-time, Small-beer that has Hops in it, before that which has none; for tho' that which is not hopp'd is smoother and softer, and so fitter to carry off the Stone from the Kidneys, yet that which is hopp'd, upon the account

count of the *Strippick* Quality, which the Hops impart to it, is not so apt to occasion sandy and stony Matter as that which is not hopp'd, the Substance whereof is more viscus and slimy. I take care to go to Bed early; especially in the Winter, than which nothing is better to perfect Concoction, and to preserve the Form and Order which duly belongs to Nature; whereas on the contrary, Night-works lessen all the Concoctions of old Men, that are afflicted with any Chronical Disease, and dangerously wound their vital Principle; and to prevent a bloody Urine, by reason of the Stone, I take great care, that as often as I am to ride a long way upon the Stones, (for if I travel never so far in a Coach in the common Roads, I receive no danger) to drink a large draught of Small-beer before I go into the Coach, and also before my return, if I have been abroad a pretty while, whereby I secure my self very well from the bloody Urine. But as to the Gout, I will add this one thing, of late years, by reason of some Errours about the five Non-naturals, the Gouty-matter sometimes strikes in, the Signs whereof are violent Sicknes with Vomiting, and some Pain of the Belly, but the Limbs are suddenly freed from Pain, and more fit for Motion, than is usual; in this Case I drink a Gallon of Posset-drink, and as soon as it is all cast up, I drink a small draught of Canary-wine, with eighteen Drops of *Liquid Laudanum* in it, to compose me to Rest, and by this means I have several times rescued my self from imminent Death.

Tho' perchance it may seem ridiculous (especially for one, whose being well or dead is scarce worth minding) to make such frequent mention of himself, yet these things are said, to the intent others may be benefitted thereby, whose Lives or Health are of greater moment, or value.

Lastly, it is to be noted, into what great danger some that are afflicted with the Gout, and Stone, cast themselves, by taking unadvisedly *Manna* dissolved in purging Mineral-water; for tho' when it is taken this way, it works quicker, and is not so nauseous; yet the small Conveniencies cannot equal an Injury occasioned by the Waters, on another account; for if the Stone in the Kidneys is so large, that it cannot pass through the passage

of the *Ureters* into the Bladder, these Waters most commonly occasion a Fit, which to the great hazard of the Patients Life, continues till the Stone returns into the *Pelon*, nor can the Sick safely venture upon Steel-waters, unless he can first certainly know, that the Stone is not so large, but that it may either find, or make a way thro' the *Ureters*, which so far as I understand, can be known only certainly this way, *viz.* if before he having been seized with a *Nephritick* Fit, (with violent Pain in either of the Reins, stretching it self through the passages of the *Ureters*, with violent Vomiting) he has found, that there is not so properly a large Stone in the *Pelvis* as a heap of small Stones, whereof one will now and then fall into the *Ureter*, and so cause a Fit, which generally does not go off till the Stone is thrust down into the Bladder. When the Case is so, no Remedy is more effectual, either to prevent the increase of small Stones, or to drive them from the Reins, as drinking freely of Steel-waters a long while every Summer.

But because it frequently happens, that one is seized with a *Nephritick* Fit, where these Mineral-waters are not to be procured, or when the Season of the Year is not favourable for drinking of them; in this Case you must proceed in this short method, without any greater Apparatus of Medicines: If the Sick is of a Sanguine Constitution, and not ancient, ten Ounces of Blood must be first taken from the Arm of the same side, with the affected Kidney; afterwards, a Gallon of Posset-drink must be presently taken, wherein two Ounces of the Roots of *Marsh-mallows* has been boyled, and the following Glister must be injected.

Take of the Roots of *Marsh-mallows*, and *Lillies*, each one Ounce, of the Leaves of *Mallows*, *Pellitory of the Wall*, and *Bears-breech*, and of the Flowers of *Camomile*, each one handful, of the Seeds of *Flax*, and *Renugreek*, each half an Ounce. Boyl them in a sufficient quantity of Water; to a Pint and an half, in the strained Liquor, dissolve of brown Sugar, and Syrup of *Marsh-mallows*, each two Ounces; mingle them, make a Glister.

When

When the Patient has rendred all by Vomit, and when the Glister has done working, a large Dose of *Liquid Ladanum* must be given, viz. twenty five Drops, or fifteen or sixteen Grains of *Matthew's Pill*.

But old Men worn out by some Chronical Disease, and old Women inclined to Vapours, (especially if at the beginning they void a black and sandy Urine) must not bleed: But as to other things they must proceed wholly according to the Method now delivered.

But to return to the Stone when it is large, the business in hand; if the *Nephritick* Person was never seized with a Fit of the Stone, that being too large to fall out of the *Pelvis*, *Chalybeat* waters cannot be used, for Reasons above-mentioned, without present danger; nor is the use of Mineral-waters better in Gouty-People, if they are old, as they are most commonly, and of a weak, and Phlegmatick habit of Body; for in these the strength of Nature is so much lessened, that it is much to be feared, that such a quantity of Water may quite overwhelm it: But whether this is the Cause of the injury, that falls upon Men of such a habit of Body, or Constitution, or not, I am sure many, whose Bodies have been much broken by this Disease, have been killed by these Waters.

And this is in a manner the Sum of all, which I have hitherto known concerning the Cure of Diseases, viz. to the 29th of September, 1686.

FINIS.

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When

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